

DISSERTATION

INSTRUCTION IN ETHICS: INFLUENCES ON UNDERGRADUATE BUSINESS
STUDENTS' ACADEMIC DISHONESTY

Submitted by

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ABSTRACT

INSTRUCTION IN ETHICS: INFLUENCES ON UNDERGRADUATE BUSINESS STUDENTS' ACADEMIC DISHONESTY

The primary purposes of the study were to assess the relationships between ethics instruction and academic conduct among undergraduate business students, to determine the reasons why they cheat, the extent to which students' conduct may be influenced by their parents' background (i.e., education, career, religious belief, and support), and the impact of self-esteem on students' conduct. Responses were solicited from students attending nine institutions of higher learning; five were located in the state of Georgia in the United States, while four were from the Caribbean (i.e., Jamaica and Grand Cayman). The regional profile (i.e., where the students were enrolled) included 41% ($n = 418$) from the United States and 59% ($n = 599$) from the Caribbean locations.

The responses were collected from a questionnaire completed at each selected college/university. Of the 1,029 questionnaires administered, 12 were disqualified. There were 1,017 qualified respondents; approximately 37% ($n = 377$) were male, and 62% ($n = 627$) were female. The remaining 1% ($n = 13$) did not identify their gender. In every case, only items with valid responses were included in the various statistical computations. The findings indicated that (a) there was no statistical significance on academic misconduct between students who did complete a course of instruction in ethics and those who did not complete a course; (b) about 40% ($n = 400$) of the students

surveyed showed positive responses to awareness of academic conduct; (c) several students admitted having engaged in academic dishonesty for various reasons (e.g., to get a better grade); (d) for perception of academic conduct, character traits and honor code appeared to have some impact on academic dishonesty; (e) parents' background (e.g., education, careers/occupation) did play a role on students' academic conduct; (f) self-esteem appeared to have some influence on academic dishonesty; (g) having an honor code did not significantly improve academic honesty within the AACSB accredited and non-AACSB institutions; (h) for the most part, it seems more female students were involved in academic dishonest than male students for given practices; and (i) younger students particularly in the 18-22 age group seems to be more involved in academic dishonesty than older students.

The overall implications of this study raise some concerns because this, like other studies, has confirmed that academic dishonesty is a menace to the education system. Therefore, academic dishonesty is not confined to one university/college but appears to be omnipresent in the aggregate grouping of the nine institutions studied. The findings suggest colleges/universities need to do more, perhaps, by being more vigilant to address students' awareness of academic misconduct, and how such actions could influence both creativity and the value of scholarship.

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CHAPTER 1 – INTRODUCTION

People routinely engage in dishonest acts without feeling guilty about their behavior. When and why does this occur? Across four studies, people justified their dishonest deeds through moral disengagement and exhibited motivated forgetting of information that might otherwise limit their dishonesty. Using hypothetical scenarios ... and real tasks involving the opportunity to cheat ... we find that dishonest behavior increased moral disengagement and motivated forgetting of moral rules. (Shu, Gino, & Bazerman, 2009, p. 2)

Academic misconduct, synonymously referred to as academic dishonesty, has made the headlines on numerous occasions. The problem is threefold in that when a related story unfolds (a) it is the education institution that becomes the focal point of attention, (b) the value of scholarship is questioned, and (c) there is a reminder that the occurrence of academic misconduct is a global problem.

While there is acknowledgement that academic misconduct among students is well published and articulated in the United States, not much is known about the behavior of students in other countries, particularly in Canada and the Caribbean. Furthermore, within the United States studies relate more to the prevalence of cheating among students, but do not specifically address the academic conduct of business major students.

The findings of studies do not adequately indicate the extent to which instruction in ethics impacts students' behavior. Furthermore, there is inadequate information in terms of whether there is greater prevalence of academic dishonesty in education institutions accredited by The Association to Advance Collegiate Schools of Business (AACSB) when compared with non-AACSB institutions. Two major criticisms of earlier studies are that too little is known about the (a) role that self-esteem plays in students'

academic behavior, and (b) influence of parents' background and religion on academic conduct of students.

Background

Today there is a real concern that academic misconduct among students could erode the value of scholarship, which may then cause cynicism about students who graduate from institutions of higher learning. Moreover, Klein, Levenburg, McKendall, and Mothersell (2007) assert that cheating among students during college is significant (p. 198). Similarly, writing in *The Chronicle of Higher Education*, Mangan (2009) concluded that business students did cheat more than non-business students. Donald McCabe of Rutgers University made similar observations as he addressed deans at the annual AACSB meeting. The AACSB accreditation standards require that ethics instruction be included in business program curriculums (AACSB International, 2004; McWilliams & Nahavandi, 2006, p. 421). However, Mangan (2009) concluded that an ethics course could have some influence on the conduct of business students.

Erosion of Academic Integrity

Writing in *The Chronicle of Higher Education*, Huckabee (2009) reports that some students and employees from the University of Texas (Brownsville) misused the university's facilities to steal test papers. Several examples discussed below point to some of the erosion in integrity to which the researcher refers.

On May 11, 2007, an article in *The Wall Street Journal* shed light on what was considered an erosion of academic integrity in some of the nation's leading business schools. The article brought into question the moral decay among business schools'

students who cheated on their exams (Allen, 2007). Others have lamented the rising rate of cheating among students (Whitley, 1998).

Young (2008), writing on the piracy of textbooks in the *Chronicle of Higher Education*, reported that students hunt for “illegal copy [copies] of the textbook[s] from the website,” a point used to demonstrate the level of unethical practices among students (p. A12). Young suggested textbook piracy had become commonplace among students as more than 25% of the students surveyed confirmed their participation in this scheme.

In a study, Shu, Gino, and Bazerman (2009) found “high temptation indeed led to more cheating [among students]” (p. 5). Similarly, Powell (2006) writing in the *Nature International Weekly Journal of Science* discussed the need to foster and promote integrity in research (p. 122). He concluded that it is a “human tragedy” to falsify other people’s work because doing so has an impact on the integrity of the research (p. 123). It is clear that the erosion in academic honesty, although not a new phenomenon, represents a serious concern to faculty as well as researchers (Livovsky & Tauber, 2006; McCabe, 1993; Roig & Ballew, 1994; Roth & McCabe, 1995; Sims, 1995; Sutton & Huba, 1995). Further, unless the incidence of cheating declines, GPAs will have little meaning (Callahan, 2004).

The researcher’s preoccupation with the erosion of academic integrity is stated here because of the damage it can do to the reputation of an academic institution. To conclude, not only are institutions branded but diplomas earned by students can add little meaning to scholarship.

Learning Integrity

Integrity in this context means earning one's grade honestly. Similarly, *Webster's New College Dictionary* (Agnes, 2007) defines integrity as, "the quality or state of being of sound moral principle, uprightness, honesty, and sincerity" (p. 742). Classroom improprieties have been around for a long time and have been a source of contention for several decades. The issue, write Braxton and Bayer (2004), has had an impact on both teaching and learning. They concluded that "students who engage in classroom incivilities are acting neither in their own best interest nor in the interest of their classmates" (p. 95). In this context, integrity affects the authenticity of a sound education system; this is why some institutions of higher learning treat violations seriously.

One of the issues confronting education administrators is the extent to which integrity can be learned. Nolte and Harris (1999) present the concept that "children learn what they live" (p. vi.). They argue, "if children live with honesty, they learn truthfulness" (p. 163). Nolte and Harris's belief in the value of morals and responsibility as something that should be inculcated in early childhood led them to extend their earlier work to include a new phraseology, "teenagers learn what they live" (Nolte & Harris, 2002, p. vi). They write about their fervent belief that parents can influence integrity especially as teenagers go through their adolescent years (2002, p. 322). They conclude that teenagers are influenced by what they see their parents do (2002, p. 6). One assumption here is that if teenagers have integrity, they will be honest (2002, p. 144). Therefore, those who are honest will not cheat. The underlying message is that students can be influenced by parents.

When students use other peoples' work without giving credit to the originator, the issue of plagiarism arises. Although this topic is discussed in subsequent sections of this study it is introduced here to show that it has an impact on integrity. In looking at staff perceptions on plagiarism, Flint, Clegg, and Macdonald (2006) reported that there are differing perceptions, which can lead to a "misunderstanding and mismatch between staff and students" (p. 145). They conclude that there is a need to reconcile various perceptions because it is important to protect the integrity of universities. Bartlett and Smallwood (2004) referred to "academic plagiarism" as "academic sins" (p. A8) because they argued that such actions undermined the education profession.

The epidemic of student misconduct (McCabe, Trevino, & Butterfield, 2002) should not be treated lightly because this type of behavior if left unattended, especially among business students, could influence students when they transition to their profession or vocation. Whitley (1998) undertook a major study on students' cheating and, although it did not elaborate on the reasons for adverse student behavior, advanced the notion that "cheating was more common among students [who] ... lived on campus, and were male" (p. 242). Whitley also identified lack of motivation as one of the dominant characteristics of students' misconduct.

Research has shown that gender plays a role in academic misconduct among students (Anzivino, 1996; Hogan & Jaska, 2000; Tibbetts, 1997). These three studies concluded that cheating was more prevalent among male than female students. Several researchers (Campbell & Lindsay, 1997; Hogan & Jaska, 2000; Scheers & Dayton, 1987) have argued that factors such as grade point average, academic major, academic

progression (freshman, sophomore, and junior), and demographics all influence students' academic misconduct.

Theoretical Precepts/Applications

Few studies have discussed students' behavior using ethical theories (e.g., Aristotelian, Utilitarianism, and Universalism) as frameworks to understand why students engage in academic misconduct. Moral decline in human values and issues of self-esteem, reflected in corporate scandals, could have some influence on students' behavior (Bullough & Bullough, 1995; Carter, 2005). Sankaran and Bui (2003) examined the relationship between "student characteristics and the levels of ethics" (p. 240). They found that not enough was being done for students in terms of guiding them toward ethical responsibility. For example, there were inadequate levels of student advisement taking place across educational institutions (p. 251). Sankaran and Bui conceded that traditional knowledge transfer was happening but that there was a lack of focus on ethics (p. 252). The conflict that students might feel between cheating and their desire to be ethical justifies the researcher's investigation on the role of self-esteem on academic misconduct.

Michaels and Miethe (1989) applied their theories on the deviance of academic cheating. They concluded that neutralization theory could be used to explain students' academic behavior. This position was supported by a later study done by McCabe (1992), whose findings suggested that there were positive relationships between neutralization theory and academic dishonesty. However, Storch, Storch, and Clarke (2002) criticized the findings from Haines, Diekhoff, LaBeff, and Clark (1986), also in favor of neutralization theory, on the grounds that the sample size ($n = 15$) in the Haines et al.

study was too small to reach any valid conclusion. In a larger sample ($n = 244$), Storch et al. found that factors such as religion, sorority membership, and other demographic variables did influence students' academic dishonesty. Storch et al. studied the relationship between cheating and neutralization theory, the causes of cheating behavior, how to control the prevalence of cheating, and ethical behavioral problems among athletes. The Storch et al. study concluded there was an association between neutralization technique denial and academic dishonesty among athletes.

Neutralization theory, however, seems inappropriate for the study of academic behavior because it is more related to exploring the behavior of criminals and persons engaged in violent crimes (Minor, 1980). Sykes and Matza (1957) define neutralization theory as a phenomenon that occurs when people recognize they have a moral obligation to do the right thing. Historically, researchers held the view that neutralization theory was used to explain juvenile delinquency or other forms of criminal behavior (Haines, et al., 1986; McCabe, 1992; Sykes & Matza, 1957). Admittedly, Sykes and Matza's (1957) postulation on moral drift is sound; however, academic dishonesty is not a crime against the state.

Although there will always be a debate in terms of what theoretical framework best explains the recalcitrant behavior of students who engage in various forms of academic dishonesty, it seems that none of this behavior constitutes juvenile delinquency. Furthermore, academic misconduct is not considered as a crime. Therefore, there is greater justification for relating academic misconduct to a study on ethics theory than neutralization theory.

Parallels between Classroom and Real-Life Paradigms

The idea that children learn what they live (Nolte & Harris, 1999) appears to have an influence on students who tend to imitate what others around them do. There are challenges facing business students and the extent to which the practice of ethics influences them as they transition from institutions of higher learning into the workplace has yet to be determined. Johns and Strand (2000) articulate that there are gaps in students' conduct across America. They recorded the challenges in this manner:

Today's business students will be confronted with a variety of ethical dilemmas in the work environment ... some may be rather inconsequential, and some may be grave enough to threaten the existence of the organization. Often, corporate executives confront situations that may not be illegal, but may be unethical. In such situations, they often must decide whether they will act in their personal interest or for the good of the society ... public virtue. (p. 315)

One study suggests there may be a link between how students behave in college and what happens when they enter the corporate world (Sankaran & Bui, 2003). Although such a notion may be premature at this stage, and further exacerbated by the lack of available literature that describes any such linkage, the transition from being college students to becoming corporate employees remains unclear.

As part of the evidence on the influence of ethics, one study concludes that most students who graduate from education institutions enter the workplace. One implication is students who develop unethical practices in the classroom are likely to bring them into the workplace. One example of an unethical practice other than academic dishonesty would be the exaggeration and embellishment of a student's resume used as a basis to showcase each applicant to prospective employers. However, many corporations do have

training facilities for which further training in ethics can be incorporated in employment development programs. Therefore, these organizations can make a difference in how employees view ethics (Sankaran & Bui, 2003).

In the classroom setting, the issue that students face is that over their course of study they look to their professors for guidance on the questions of what constitutes academic honesty. But around these students there is competition to get into schools from which employers seek graduates. Similarly, there is competition among students to get good grades and sometimes this affects how students perform, their self-esteem, and by extension, how they conduct themselves in an academic setting. There is some evidence in the literature to support the notion that there is a relationship between the performance of students (assessed on the basis of GPA) and the potential to engage in academic misconduct such as cheating (Campbell & Lindsay, 1997; Nelson & Schaefer, 1986; Scheers & Dayton, 1987). David Koeppel (2006) writing in the *New York Times* reported that in a Job Outlook 2007 survey, 58% of employers surveyed indicated that they are less likely to employ students with less than a 3.0 GPA. For example, in reviewing the published employment data retrieved from the Department of Chemical Engineering of Penn State University (PSDCE) for 2008, it was observed that engineering graduates with GPAs in excess of 3.0 secured employment shortly after graduation. Although not business related, PSDCE reported that 62 of 83 graduates of the 2006 class, or 75%, with GPAs of 3.23 or higher were able to find a job soon after graduation. Similarly, in an article appearing in *nHumanities* (2006), the writer makes the point that some employers look at the grade point average of applicants.

In contrast, Koeppel (2006) suggests that some employers tend to look at the totality of the applicants because GPA does not take into account an applicant's full potential. The question then becomes: To what extent might this put pressure on students to engage in academic misconduct? Some students feel they do not stand a chance of getting a job unless they achieve a high grade point average. In a study ($N = 146$), Campbell and Lindsay (1997) found that the propensity to cheat was found to be higher among students with low GPAs than those with higher GPAs (p. 23).

Some studies have discussed the impact of academic dishonesty or, in a wider context, academic behavior (Levine, McCabe, & Tribble, 2001; Whitley & Keith-Spiegel, 2002; Zimmerman, 1998), however, only one study has been found (Bloodgood, Turnley, & Mudrack, 2008) to correlate the relationship between instruction in ethics and students' academic honesty.

AACSB and Ethics Instruction

Most studies tend to focus on the prevalence of cheating but fail to distinguish between academic misconduct in business schools accredited by The AACSB and non-AACSB. In reporting on the distinction between AACSB and non-AACSB accredited programs, Iyer and Eastman (2006) explained that the latter programs did not include the mandatory requirement of ethics instructions. In the case of the former, The AACSB accrediting body stipulates that instruction in ethics must be included in undergraduate and graduate business programs.

Premeaux (2005), in writing on students' perceptions on cheating, explained that cheating was fairly commonplace at AACSB schools. He concluded that such behavior at these AACSB schools was disappointing and argued it may come to affect students

transitioning to the workplace (p. 416). Non-AACSB schools do not make teaching ethics a mandatory part of their programs. Students can opt not to take an ethics course as part of their portfolio of courses. What is unknown is: Because ethics is not mandatory for non-AACSB students, do these students cheat more than AACSB students?

One of the most pervasive arguments among researchers is that ethical theory pivots around one basic concept: Being able to distinguish between right and wrong. Ethics as applied to education is not a new theory. For example, from childhood we are told that honesty is the best policy. What parents are in fact telling their children is that achievements must be earned through honest efforts. Therefore, if students copy from the work of other students, they have cheated.

Academic dishonesty or students' academic behavior is discussed repeatedly throughout the literature but there is a deficiency in terms of how students' behavior relates to reasoning in ethics (Eastman, Iyer, & Reisenwitz, 2008; Kidwell, Wozniak, & Laurel, 2003). Academic misconduct has been discussed in the context of moral development (Glenn & Van Loo, 1993; Ratner, 1996), but no mention was made of how students' understanding of ethics might influence their academic behavior.

Statement of the Research Problem

While there is adequate research to substantiate widespread existence of academic dishonesty, relatively few studies have focused on the extent to which ethical theories may explain academic behavior. Similarly, while there is recognition that business programs need to incorporate ethics in the curriculum, little literature exists on the impact that a course in ethics would have on a students' propensity to engage in academic misconduct. In an editorial in *The Wall Street Journal*, Gettler (2007) laments the fact

that business schools have failed to adequately include the teaching of ethics in most programs. He refers to the shortcoming as being part of the struggle to teach ethics in a manner similarly used to teach mathematics and philosophy. Before 2007, no studies were found to correlate ethics instruction and academic behavior; research by Bloodgood, Turnley, and Mudrack (2008) did address the question. This study will explore the relationship between ethics instruction and students' academic conduct to determine whether the former influences the latter.

Purpose of the Study

The purposes of this study will be to investigate:

1. The relationship between instruction in ethics and student conduct in an academic environment.
2. The overarching reasons why some students engage in academic misconduct.
3. The extent to which students' conduct might be influenced when they are exposed to a course in ethics instruction.
4. The extent to which ethics theories can be used to explain academic misconduct among students.

Research Questions

This study is primarily concerned with gaining a better understanding of the relationship between ethical instruction and ethical conduct among students. Therefore, the principal research questions of the study are:

1. Is there a difference in the prevalence of academic dishonesty between students who have had ethics instructions and those who have not had?

2. What is the association between students' awareness of academic conduct and the prevalence of academic dishonesty?
3. What are the reasons for academic dishonesty among business students?
4. What is the relationship between students' perception of academic conduct, character traits, and honor code?
5. Is there a difference in students' academic conduct based on their parents' background and religion?
6. Is there a relationship between self-esteem and students' academic conduct?

Supplementary Questions

1. In relation to the honor code, is there a difference in students' academic conduct between those who attend AACSB accredited schools compared with students who attend non-AACSB schools?
2. Is there a difference in academic conduct between male and female business students?
3. Is there a difference in academic conduct between younger students (under 32 years) and older students (32 years and older)?

Definition of Terms

Academic misconduct. An umbrella term that includes academic dishonesty as one of its principal subsets. *Academic dishonesty* includes cheating, plagiarism, any form of deception, stealing other students' books and materials, falsifying records, grade tampering, and taking pages from books not belonging to the student.

The Association to Advance Collegiate Schools of Business (AACSB). Founded in 1916, The AACSB began its accreditation function in 1919. As of September 2009, there

are 570 universities and colleges in 33 countries that hold AACSB accreditation.

Accreditation signals that the designated institution produces graduates who achieve the highest quality business education from highly qualified faculty members (having doctorates) in their fields of specialization. There are certain mandatory courses; for example, a course in ethics must be part of the business curriculum. The process of evaluation ranges from five to seven years after which a final decision is made by The AACSB accrediting body. An institution can be decertified at the end of the initial six years of recertification if it fails to maintain the required measurable standards.

Business students. Students who pursue programs of study/majors in business (e.g., accounting, finance, marketing, or management).

Ethics course. A course that studies the branch of philosophy that focuses on human values. Such a course is built on the premise that there is a distinction between right and wrong, good and evil. The understanding and practice of this characteristic in a positive manner signifies a person with high moral values.

Institutions of Higher Learning (IHL). The terms higher education institutions, colleges, and universities are used interchangeably. Depending on their charter, these institutions award postsecondary certifications and diplomas at the bachelor's, master's, or doctoral levels.

Non-AACSB schools. Business schools whose programs are not part of The AACSB body. Some schools do not apply because the process of accreditation from the AACSB accrediting body is rigorous, time consuming, and expensive as only faculty with terminal degrees can be hired.

Non-Business Majors. Typically students pursuing a program of study other than business (e.g., humanities, social sciences, physical sciences, or the arts).

Delimitations

The researcher limited the population to students at Institutions of Higher Learning (IHL) that offered courses in ethics. No distinction was made between a business ethics course and non-business ethics courses. Other delimitations included:

1. Students at nine institutions of higher learning participated in this survey.
2. Participants included both males and females.
3. Only business schools with enrollments of 200 undergraduate students or more were asked to participate in the study.
4. The survey was administered toward the end of the Spring 2010 term.

Significance of the Study

There is a recurring demand to put an end to unethical actions practiced by people in the workplace. Business schools are being called upon to counter the negative impact of unscrupulous employees, some of whom are university and college graduates (Newman, 2007). As corporate profits become leaner, there will be the temptation to cut corners even if quality is compromised. This could have a bearing on the ethical behavior of those managing corporations (McNamara, 2008). Therefore, the findings of this study could be used to validate whether instruction in ethics can influence students' conduct in the academic setting. This study might provide universities with some insight in terms of making ethics courses mandatory instead of elective. The findings could set the stage for researchers to gain a better understanding of the relationship between students' academic training and their adaptation to business ethics in their role as corporate employees.

Although there are deficiencies in the literature, The AACSB has made it clear that educational institutions seeking its accreditation must include a mandatory course in ethics.

If students in their university training are taught that it is morally and ethically wrong to obtain success other than by honest deeds, much could be gained when they transition to corporate roles (Thiroux, 2001). Results obtained from this study could inform education policymakers of how business schools can re-position themselves to make business education more relevant to the ethical needs of society.

Assumptions

This study relies on honest responses of students participating. Each response is particularly important as it reflects each student's perception of what constitutes academic misconduct. Therefore, the following assumptions are made.

1. Each participant accurately recorded responses indicative of his (or her) behavior.
2. There was no collaboration between one student and another in providing responses.
3. Because of anonymity participants felt at ease to provide responses based on their own conscience or their own behavior.
4. The instrument evaluates the influence of parents' background on students' academic misconduct. The assumption is, there is a relationship between students' conduct and parents' background. No available literature was seen to support this assumption.

Researcher's Perspective

The researcher holds a professional qualification in accounting and has credentials in the form of graduate degrees in accounting, public administration, and finance and tax

concentrations. The researcher comes from a corporate management background having worked overseas as well as in the United States for more than 20 years. The researcher spent four years (part-time) teaching business related courses at high schools, and subsequently taught college level courses at DeVry University in Atlanta, Georgia, and at the University of Technology in Kingston, Jamaica, for a combined period of slightly less than 15 years. These experiences have provided the background and the invaluable experience that made this study so exciting.

Although this study of academic dishonesty draws upon the researcher's experience in classroom settings, it is often challenging to separate this mode of conduct from those in the workplace. In the classroom, the challenge is how to embrace the concept of teaching and learning so that students become excited and invigorated to the point where integrity becomes the centerpiece of genuine achievement and scholarship.

The corporate world faces similar challenges because corporate officers and employees alike want to maximize profits and earn higher wages, respectively, while exerting minimal effort (Maxwell, 2003; Newman, 2007). In the corporate environment, the levels of unethical practices judging from corporate scandals are widespread compared to those in the classroom. It is clear from some of the behaviors exhibited in corporations that students are in a dilemma. In school, students are expected to act honestly, ethically, responsibly, and professionally. The reality however, is that when students transition to corporations they get into a survival mode (Maxwell, 2003). However, as instructors we must emphasize to our students the merits of being honest at all times. Finally, education must be seen as the process/method/vehicle by which we accelerate and progress through the organizations with which we engage.

CHAPTER 2 – REVIEW OF LITERATURE

The purpose of this chapter is to provide a review of the literature as it relates to academic misconduct among undergraduate students in higher education. More specifically, the primary focus is on business students and their relationship to instruction in ethics. This chapter provides a comprehensive review on academic misconduct as it relates to two of the most common forms of dishonesty among students: cheating and plagiarism. The discussions on academic misconduct over the years have been unrelenting as researchers attempt to determine the causative factors of this pervasive behavior among students (Baker, Berry, & Thornton, 2008; Bowers, 1964; Callahan, Dworkin, & von Dran, 2008; Campbell, 1933; Dahl, 2007; Drake, 1941; Gynnild & Gotschalk, 2008; Kelley & Chang, 2007; McCabe & Trevino, 2002; Rakovski & Levy, 2007). Hence, cheating and plagiarism represent the two focal points upon which this study is built. This is not to say that other forms of misconduct are not important.

Cheating and plagiarism are the two areas that have captured not only educators' attention but also the public's attention as everyone seeks to get answers to questions such as: Is there a link between the extent of cheating in the classroom and cheating in corporations? Is there a relationship between academic dishonesty in the classroom and certain dishonest practices in corporations (e.g., stealing company property, incorrect recording time-clock information, and other actions that impede efficiency)? Their inclusion here merely raises awareness; hence, these questions were not addressed in the study. Callahan (2008) draws a parallel between academic integrity and business ethics.

He states, “the parties most likely to be injured by workers’ misconduct are their employees” (p. 757). Similarly, Rakovski and Levy (2007) opined that there are concerns in the business community when students are dishonest with their program of study because the affected education institution is brought into disrepute. Newman (2007) discusses the need to integrate business and ethics together to have a more positive influence on students. However, what cannot be ignored is that educators, administrators, and professionals (military and civilian) are affected in some way especially when they preside over an entity that has become the subject of either academic misconduct or some acts of unethical practices. However, this study focuses on students.

This chapter will cover the historical perspectives of academic misconduct, current perceptions on academic misconduct, definitions of it, and the difficulty in measuring it, the prevalence of academic misconduct, and the extent to which we can teach ethics. The chapter explores the notion of ethics theory from a philosophical viewpoint and discusses its relevance on academic misconduct, values, and self-esteem.

Definitions

To gain a better understanding of the discussion embodied in this research, it is important to define the meanings ascribed to certain terms used in the study. An important caveat is that certain meanings will vary from institution to institution. Similarly, there will be variations among institutions of what sanctions are imposed and the seriousness attributed to these breaches within each institution.

Academic Misconduct: Some Differences

This study uses academic misconduct as an umbrella term to embrace any form of academic breach that take place in institutions of higher learning. This study uses

academic dishonesty as an interchangeable term that is accorded the same meaning as academic misconduct. Two principal forms of student misconduct are used in this study: cheating and plagiarism. The question that often arises is: What is academic misconduct/academic dishonesty? The one recurring theme throughout any definition is—it depends from whose perspective the answer is given (McCabe, 2005; McCabe & Trevino, 1993).

The terms academic dishonesty or academic misconduct will have different meanings to different people and therefore to ensure uniformity it is necessary to examine some of the meanings encountered in the literature. One of the challenges of ascribing a specific meaning to academic dishonesty is that variations exist from one university to another (Bowers, 1964). Therefore, seldom do two universities define academic dishonesty or student misconduct in the same way (McKeachie, 2002). Because the Center for Academic Integrity (CAI) has been championing the cause for academic integrity, it seems appropriate to include CAI's statement on what constitutes academic dishonesty, especially as it contains the five values akin to character education:

Academic honesty is a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow the principles of behavior that enable academic communities to translate ideals into action. An academic community flourishes when its members are committed to the five fundamental values. Integrity is built upon continuous conversations about how these values are, or are not, embodied in institutional life. (1999, p. 4)

In a response to the definition of what constitutes academic dishonesty, Jones, Taylor, Irvin, and Faircloth (2001) state “academic dishonesty includes cheating and plagiarism, the theft of ideas and other forms of intellectual property whether they are published or not” (p. 1). They further reported that at the Florida Institute of Technology, academic dishonesty includes “cheating, fabrication, facilitating academic dishonesty and

plagiarism” (p. 1). As to what is misconduct, Powell (2005) suggests that the definition now includes “plagiarism—appropriating another person’s ideas, processes, results or words, without giving proper credit...” (p. 737). Powell concludes that the term “misconduct” should not include the case where people make honest mistakes.

Similarly, the University of California, Berkeley (UCB) Instructor’s Guide (2005) defines academic dishonesty as “any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community” (p. 4). UCB’s code of conduct cites certain actions—cheating, plagiarism, academic misconduct, false information, theft and fabrication of information, damage and theft of intellectual property, selling and publishing course lecture notes, alterations to university documents, and disturbances in the classrooms—as analogous to academic dishonesty.

North Carolina A & T State University (NCA & TSU Student Handbook, 2009) defines academic dishonesty as including cheating, plagiarism, and unauthorized possession of examination materials, unauthorized changing of instructors’ grades, aiding and abetting infractions leading to students’ misconduct, and assisting other students to violate university rules. Similarly, at Colorado State University academic integrity is conceptualized as “doing and taking credit for one’s own work” (Policies and Guiding Principles, 2009, p. 6). The university amplifies its definition of academic dishonesty by including actions such as “cheating in the classroom, plagiarism ... (copying work or other people’s ideas), unauthorized possession or disposition of academic materials ... falsification of academic work, and facilitating certain acts, for example, cheating” (p. 6).

From the various definitions and related actions provided, it is apparent that universities have not clearly or unanimously defined academic dishonesty or academic misconduct. However, they do provide their own examples of actions that constitute academic dishonesty. Notably, each definition includes a prefaced clause to the effect that “academic dishonesty includes ... but is not limited to ...” those actions that it provides. The salient point is that universities cannot be challenged on the grounds that certain examples were excluded. Against these backgrounds, this study defines academic dishonesty as any instance where a student’s action involves academic cheating and/or plagiarism.

In a study on academic dishonesty, that is, cheating and plagiarism, Jones et al. (2001) noted that cheating takes place when information is shared among students during an examination. Other examples of cheating include using the same paper repeatedly in several courses by the same student, and students lying to protect fellow students.

It is difficult to define cheating as a subset of academic misconduct. According to Pulvers and Diekhoff (1999), variations in the rates of cheating occurred because there appears to be differences in how to define cheating. They made it clear there are “internal personal variables” as well as “external situational variables” that are important to defining cheating (pp. 488-489). For example, Pulvers and Diekhoff felt moral development (an internal personal variable), as well as peer pressure (an external situational variable), were two important factors that must be understood before one understands what constitutes cheating.

Defining cheating has never been easy. Brownell (1928) conceded “being a cheater is something like being a criminal—it depends upon being caught” (p. 764).

Although he did not define cheating, Brownell characterized cheaters as “psychoneurotic,” “extroverted,” and, “introverted students” (p. 764). A similar position was taken by Drake (1941) when he concluded that cheating was “a basic defect of character” (p. 418). None of the studies examined from 1920 through 1960 (Anderson, 1957; Atkins & Atkins, 1936; Black, 1962; Brownell, 1928; Campbell, 1933; Drake, 1941; Parr, 1936; Ramsey, 1962) gave a common definition of cheating.

Although Bowers (1964) recognized that cheating was one form of academic misconduct, his study excluded a definition of cheating. It appears from reviewing the literature that the more recent studies are concerned with gaining greater insights into what constitutes academic misconduct (Davis, Grover, Becker, & McGregor, 1992; Hard, Conway, & Moran, 2006; Iyer & Eastman, 2006) as a way of predicting how students will behave under a given set of circumstances. Schmelkin, Kaufman, and Liebling (2001) indicated “there was no standard definition of academic dishonesty...” (p. 4). They also asserted that the problem was further exacerbated by the fact there was no agreement in terms of what was included in cheating (p. 6).

Understanding the Nature of Plagiarism

Plagiarism has become a debatable topic because it touches on the nerve center of the education system. Because of its negative impact, some researchers attribute the occurrence of plagiarism as either part of “sloppy scholarship” (Fossey & Cutright, 2009) or one of deception. Because there are legal consequences, those who perpetuate plagiarism must realize that there is little tolerance for its existence (Arenson & Gootman, 2008; Flint et al., 2006; Marsh, 2007; Wasserman & Gelman, 2009).

One of the critical issues in any discussion on academic dishonesty is to decipher what constitutes plagiarism (Powell, 2005). This problem is further exacerbated by the unrestricted access to the Internet. However, with respect to Internet plagiarism, McCabe and Stephens (2006) cautioned that although there is a proliferation of “cutting and pasting” among students, only a few of them admit to plagiarizing entire papers.

Merriam-Webster's Collegiate Dictionary (1993) defines plagiarism as occurring when someone else's ideas are presented as one's own. Plagiarism is not a new phenomenon. From a legal perspective, Lindey (1952, 1974) pointed out that one judge, in addressing the issue of plagiarism, aptly referred to it as “infringement ... to be determined by comparative reading, not by dissection” (1952, p. 55). In discussing his theme, “parallel-hunting” Lindey (1952, p. 51) metaphorically asserted that “parallel lines sometimes meet” (1952, p. 53). He went on to state that plagiarism was ubiquitous in that it was present in books and magazines, plays, arts, and music, and concluded “once a piece of literary is put in circulation, it becomes highly pilferable” (1952, p. 231). Marsh (2007) refers to plagiarism not only as a crime but also as “literary theft” (p. 10). In comparing plagiarism in roughly the same era as discussed by Marsh, but many decades apart from the work of Lindey, Scanlon (2006) indicates that technology has made plagiarism easier because it facilitates the cut and paste phenomena almost painlessly. A further opportunity exists in that many courses are now offered online. Therefore, when a student takes exams online there is no certainty whether the exams are actually being done by that student or by a “paid test-taker.” In discussing plagiarism in the context of the Internet, Scanlon (2006) stated:

The notion that Internet-assisted student plagiarism is on the rise has become part of the conventional wisdom about education in the 21st century. Although

empirical studies suggest the case may be overstated, many schools and universities are using online plagiarism-detection services to sniff out cribbing. (p. 1)

Scanlon (2006) acknowledges the high incidence of plagiarism among university students. However, Scanlon fervently believes that the issue of academic dishonesty will not go away until university administrators address the more fundamental questions relating to pedagogy and ethics. Admittedly, there are contradictions in his study. On one hand, Scanlon argues “about 25% [of the undergraduates] went online to cut-and-paste others’ work into their class assignments without citation” (2006, p. 2). On the other, Scanlon makes a sweeping statement “that every kid with a keyboard is downloading term papers or cutting and pasting his way to graduation” (2006, p. 2). However, he did not provide empirical evidence to substantiate his point on the downloading of term papers. Given the magnitude of the problem cited, it appears that even Scanlon may have understated the gravity of the problem he so eloquently describes. He concedes “the hard evidence is inconclusive: we simply do not know for sure the extent of cyber-plagiarism ...” (2006, p. 3).

In a study on the extent of plagiarism in the university, Thompson (2006) articulates that plagiarism appears to be taking on new dimensions. She cites one study that shows as many as 27% of the students admitted to cutting and pasting to complete their assignments (p. 2439). In relation to work she gave to her students, she reported “at least 6% of the essays submitted by my college freshmen had been plagiarized” (p. 2439). She mentioned some of the “unintended lessons” gleaned from plagiarism. For example, there was at least one instance when a student admitted to having turned in the wrong

draft. Presumably, the instructor should have been given the assignment containing the least cut and paste version of the assignment.

Thompson (2006) questioned the role models available for students to emulate. She provided a plethora of examples to show that faculty and other professionals were not always the best role models. She cited at least three notable instances when two college presidents resigned and a faculty member was demoted for having plagiarized other people's work. The problems are further exacerbated, she says, because parents in an effort to see that their children get better grades are writing term papers for the students. Thompson (2006) synthesized:

Two shifts in university structures and aims have contributed to the ethically equivocal atmosphere in education. First is the increasing use of business models that encourage administrators to view students as customers who must be kept happy. ... The other profound shift in university climate concerns the increasing use of adjunct faculty whose ad hoc status makes them particularly vulnerable to administrative pressures. (pp. 2444-2445)

Thompson's statement on the increasing use of adjunct faculty suggests these instructors are in a hurry to get the job done so they can return to their substantive job. Furthermore, the statement gives the impression that only full-time faculty members have the time to enforce university policies.

Further examination of Thompson's (2006) position on plagiarism points to why the problem continues to be viewed as a form of academic misconduct in the education system. She argued that there needs to be a fundamental shift in the way universities see students. The business model concept of customer is the customer is always right. It follows therefore if students are viewed as customers, then even when students are involved in academic dishonesty the students can do no wrong.

One of the criticisms of this business model approach is that while there is a commercial contract between the business operator and the customer, the relationship between faculty and student is fundamentally different. Faculty members have both a fiduciary as well as a professional responsibility to their students. For example, faculty members perform various roles: parent, counselor, and friend. As a business operator, you are not expected to counsel customers.

The incidence of plagiarism in higher education continues to be debated. McCabe, Butterfield, and Trevino (2003) reported that 40% of the students they surveyed admitted to having plagiarized materials in at least one instance. In a similar study, Gerdy (2004) asserted that students plagiarized even though they knew it was wrong. She argued that the Internet appeared to have acted as a catalyst for plagiarism in that it gave “universal access” (p. 432) to the materials needed by the students. Gerdy found principal reasons that contributed to students’ plagiarism: the need for a higher grade, “sloppiness,” waiting for the last minute to do assignments, and a lack of understanding in terms of what constitutes plagiarism (p. 433). She concluded that faculty members should consider utilizing detection techniques to minimize the incidence of plagiarism among students (p. 440).

Although Scanlon (2006) and Thompson (2006) express grave concerns about the magnitude of plagiarism, Kellogg (2002) provides contrasting views on the nature of the problem. In relation to online plagiarism, Kellogg felt that other researchers may have overstated the problem. He went on to state that in a certain study, 16.5% of the students surveyed admitted any involvement in plagiarism. Robinson, Amburgey, Swank, and Faulkner (2004) found the incidence of plagiarism was as much as 80% of those they

surveyed. Although there are disagreements among researchers in terms of the extent of plagiarism, it is clear universities recognize the existence of this phenomenon among their students. There is recognition that plagiarism can be deliberate as well as accidental. The problem with plagiarism is there are websites, for example, termpaperrelief.com and bestessays.com, that make it relatively easy for students to use online services to complete their assignments (Dodd, 2006; Scanlon & Neumann, 2002). Such services contribute to academic misconduct and inhibit scholarly creativity by students. These views were supported by Marsh (2007) as he weighed in on the “plagiarism debate” (p. 31).

There is also a need to identify some of the more common categories of academic dishonesty. Gehring and Pavela (1994) identified the four principal types as (a) cheating, using another person’s material with or without permission; (b) fabrication, falsifying information about a citation; (c) facilitating academic dishonesty, assisting someone to commit an academically dishonest act; and, (d) plagiarism, using someone else’s words or works (e.g., graphics, videos, photos) as if these were one’s own.

We must never pretend, however, that academic dishonesty is only confined to the United States; it is recognized as a global problem. For example, in Australia, Graham, Monday, O’Brien, and Steffen (1994) reported the prevalence of cheating as being between 90% and 92% among students surveyed; in the United Kingdom, Newstead, Frankling-Stokes, and Armstead (1996) reported cheating as having reached around 88% of students surveyed (Graham et al. and Newstead et al. as cited in Sheard, Dick, Markham, Macdonald, & Walsh, 2002).

When one takes a closer look at academic misconduct or dishonesty as a whole, but more specifically at academic cheating, it is difficult to find two studies that agree on what is academic dishonesty. There are divergent views on the lack of precision of the definition of academic misconduct. However, the most common theme based on the exploration of the literature appears to be cheating and plagiarizing. One of the principal reasons for the lack of a universal definition on academic dishonesty is that there are uncertainties in terms of what it is and how to measure it. Similarly, with the passage of time and with the advent of computers, academic misconduct has provided greater challenges to instructors and academic administrators alike.

Measurement of Academic Misconduct

One of the problems associated with measuring academic dishonesty is that it is difficult to define. Measurement is elusive because if something cannot be defined accurately, then it cannot be measured precisely. In looking at the difficulty associated with the measurement of academic dishonesty, Kibler (1993) stated “one of the significant problems a review of the research literature on academic dishonesty reveals is the absence of a generally accepted definition” (p. 253).

In exploring the difficulties of measuring academic misconduct, Baird (1980) expressed the view that several factors contributed achieving an accurate measure of what constitutes academic misconduct. Cole and McCabe (1996) supported Baird’s position and concluded that factors such as differences in sample size, the point in time at which the data are collected, the institutions to which the samples relate, differences in the university settings, perceptions among students at various universities, and differences in the methods used to measure the variables accounted for some of the problems associated

with assessing academic misconduct. Based on Brown and Emmett's (2001) findings, these represent some of the factors that contribute to variations in measuring academic misconduct.

Measurement, by definition, means that each person must begin at the same point. Similarly, each person needs to use the same unit of measure. This concept should not be difficult to understand especially when related to the simple notion of profit measurement, a phenomenon often encountered in business. If one accountant uses the cash basis to account for profit then this financial result will almost always yield a different profit than when another accountant chooses to use the accrual basis. Similarly, a meaningful comparison cannot be made between a large and a small business without using a common base to minimize distortions because of the size and complexity of the entities. A similar logic needs to apply when measuring academic dishonesty.

A significant problem associated with measuring academic dishonesty is that it is a self-reported behavior. Therefore, students may chose to either under or over-report depending upon whether they had a good or bad experience with the university (Whitley, 1998; Williams & Paulhus, 2004).

Similarly, reliability is a factor in self-reporting and indeed a problem in measuring the degree of accuracy of academic dishonesty. For example, Scheers and Dayton's study (as cited in Sheard, Dick, Markham, MacDonald, & Walsh, 2002) found in self-reporting surveys, under-reporting of academic misconduct varies between 39% and 83% of students surveyed ($N = 287$). This level of variation is significant and can affect validity and accuracy of the results. Different findings seem to emerge over

different periods (McCabe & Trevino, 1993, 1997; McCabe, Trevino, & Butterfield, 2001; Whitley, 1998).

Another difficulty in measuring academic dishonesty is “asking students to classify behaviors as a dichotomous rating” (Sheard et al., 2002, p. 184). Asking students to classify their behavior can produce varying results if it forces them to commit to a defined band. Yet another problem is “the frequency of practice between particular cheating behaviors varies greatly” (Sheard et al., 2002, p. 184). If the prevalence of cheating was compared between two countries, what may be acceptable in one country may be deemed inappropriate in the other. In any case, cultures and subcultures may be different.

Another problem relates to reluctance on the part of some students to report friends or fellow students who they know cheat. Sheard et al. (2002) found in a study of 791 students “90% said that they would not report a cheating incident ... and that 49% to 86% ... would not ... report cheating of another student” (p. 184). There is no consistency in the way these findings are reported, which tends to leave gaps in the conclusion of such findings.

Against these backgrounds it seems that comparisons among various studies must be synthesized and translated into some common denominator (percentage method is used in business to account for relative size) if in fact we are to accurately measure academic misconduct. This is important because there is a need to compare apples with apples. Finally, there must be uniformity across institutions on what constitutes academic dishonesty. Only in this way can we do any meaningful comparison across universities, let alone comparisons across various studies.

Historical Developments in Academic Misconduct

For several decades researchers have grappled with the issue of academic misconduct, sometimes referred to as academic dishonesty (Brickman, 1961; Lupton & Chapman, 2002). Academic misconduct has plagued the education system in many parts of the world, and has caused public alarm in terms of what can be done to remove this malignant disease from the education systems (Caruana, Ramaseshan, & Ewing, 2000; Chapman & Lupton, 2004; Desruisseaux, 1999; Haines, et al., 1986; McCabe & Stephens, 2006; McCabe & Trevino, 2002; Newstead, Franklyn-Stokes, & Armstead, 1996; Sheard, et al., 2002).

To put into perspective, academic dishonesty or misconduct continues to take away from some of the scholarly achievements earned honestly. If nothing else, academic misconduct has grown in sophistication in that more creative ways are being found to beat the system.

Although some researchers theorized that the genesis of academic misconduct dates back thousands of years, there is no documented evidence to authenticate or to invalidate their views. What were some of the earlier thoughts on academic misconduct during the twentieth century, and why is this important to what happens today? To answer this question the researcher explored literature dating from one of the earliest studies, Brownell (1928), through more current research such as Dahl (2007

What is known, however, is that a fair amount of interest has been generated from the 1920s to the present period. For convenience, this study establishes two periods starting with the 1920s through the 1990s. This first period provides an encapsulation of

selected studies to determine whether there are lessons to be learned. The second period covers the years 2000 and beyond.

Historical Period 1920s through 1990s

In turning our attention to academic misconduct, the researcher takes the position that academic misconduct is not a new phenomenon. Although no one knows for sure the exact date that signifies the start of academic dishonesty, there is some consensus that academic misconduct is a long-standing problem (Anderson, 1957; Brownell, 1928; Campbell, 1933; Fox, 1988).

Brownell (1928) found “cheaters were much more extroverted than the average student, 71% being more extrovert than the campus average” (p. 764). Brownell indicated that there were many instances where students who engaged in academic misconduct were characterized by a combination of low intelligence and extroversion. Brownell concluded that students who were high achievers had distinct character traits of introversion and high intelligence. However, one of the limitations of Brownell’s study was that it included 30 students, which may not be representative of the student population. In any case, according to Brownell the sample had been obtained “through underground and unofficial channels” (p. 764). One of the primary criticisms of Brownell’s method of selecting his sample as articulated by Kalton (1983) is it “is subject to a risk of bias of unknown magnitude” (p. 91). Kalton concluded the non-probability sampling design used by Brownell lent itself to subjective evaluation. This suggests caution must be taken when interpreting Brownell’s findings.

Students’ honesty appears to have been a major concern to researchers in the early 1930s. According to Campbell (1933), an extensive study on state universities was

conducted to identify “personality traits” of academic cheaters (p. 403) and the extent to which these traits could be measured. The study found students plagiarized and cheated on examinations. Campbell’s study appeared to be more sophisticated than other studies because he made extensive use of the “spy system.” Essentially, during an examination he integrated students at varying levels (freshman, sophomore, junior, and senior), and based on pre-assigned seating, infiltrated the group with advanced students who acted as spies (unobtrusive observers). Based on their vantage point, these spies could observe the behavior of other students. Like Brownell’s (1928) study, Campbell found significant differences between cheaters and non-cheaters. He argued that students who cheated possessed personality traits such as “neurotic tendency,” “dominance submission,” “introversion-extroversion,” and “self-sufficiency” (p. 405).

Campbell (1933) concluded that a high percentage (more than 50%) of students surveyed at the state universities he investigated admitted being involved in academic misconduct (p. 408). Campbell cautioned readers not to hastily classify students as being either honest or dishonest because it may not be justified to do so (p. 408). However, the results of the Brownell (1928) and Campbell (1933) studies contrast sharply with Hartshorne and May (1928) who asserted that certain character traits (honesty and morality) bore little evidence in terms of how they contributed to academic dishonesty. In this respect, Baird (1980) theorized “moral conduct was specific to the given situation” (p. 515).

Student misconduct continued to take center stage in the 1930s and Parr (1936) questioned, among other things, whether the contributing factors included students’ mental ability, family conditions, and economic status. He asserted “any factor which

serves as a handicap to an individual or brings pressure to bear upon him [her] is likely to produce dishonest behavior” (p. 326). Unlike other studies, Parr (1936) made it clear that students who participate in extra-curricular activities are likely to have less time for studies and by extension will be hard-pressed to keep up with their school work. He implied this could affect their grades. When this happened, these students were likely to resort to any means to help them make better grades even if it meant engaging in behaviors inimical to honorable conduct. Like researchers before him, Parr felt personality affected students’ conduct and he advanced the view that a lack of character training played a dominant role in the high incidence of student misconduct, a phenomenon that seemed to be growing out of proportion among students as they sought the easy way out. Parr concluded that teachers need to take greater care to identify students who engage in various forms of academic misconduct, determine if this is a function of their teaching methods, and, with a paradigm shift, create academic programs that fit the students’ needs.

From as early as the 1930s, questions have been raised as to whether teaching method contributed to academic misconduct. Atkins and Atkins (1936) explored the extent to which teachers’ honesty impacted students’ behavior. They acknowledged that character education was important especially when emphasizing honesty. The study revealed that prospective teachers were a party to academic misconduct, particularly the manner in which some teachers prepared students for their examinations. Atkins and Atkins suggested this impacted several factors such as “intelligence,” “overstatement,” “achievement,” “effort,” “fear of failure,” and “the effect of ethical instruction” (p. 595). When instructors give the same examinations repeatedly over the years (although to

different students) without modifications, such action encourage academic misconduct among students. Recycled examinations provide opportunities for students to cheat in their examinations. Why? Because students completing the examinations in the current semester may be able to obtain the examinations used in the previous semester.

Atkins and Atkins (1936) drew a parallel between effort and honesty. They argued that there was a common myth among teachers that students who exerted effort, whether they were bright students or not, were unlikely to engage in academic misconduct. Their study reveals “there is a positive relation between honesty and effort” (p. 597). Atkins and Atkins concluded “intelligent and energetic students tend to be honest” (p. 603) and that less cheating was likely to occur in a well-managed classroom setting. The results of this study also showed that certain interventions can be instituted to prevent academic misconduct. In any case, it seems teachers do have a role to play in minimizing academic misconduct.

Earlier studies were pursuing a path embedded in the notion of a pattern among students’ character that caused them to cheat (Atkins & Atkins, 1936; Bonjean & McGee, 1965; Bowers, 1964; Brownell, 1928). One can only theorize at this point in the history of academic misconduct (in the 1920s and 1930s), whether there was correlation between character and intelligence. To the extent this is true, there needed to be an understanding in terms of why it was so. Hence, Drake’s (1941) study at the beginning of the 1940s could be viewed as being timely. Given the studies on academic dishonesty before his study, Drake wanted to determine and explore what caused students to engage in acts of academic misconduct bearing in mind the level of risks involved. After all, if caught it could bring a premature end to the student’s career. Drake argued there were some

teachers who seemed content with the notion that when a student cheats he (she) is hurting no one except himself (herself). Apart from this, Drake asserted there were other teachers “who view cheating as evidence of a basic defect of character ... still others interpret such behavior as a direct affront to themselves” (p. 418). Teachers falling in the latter group would be vigilant to detect anything that could indicate the presence of academic misconduct in their own environment.

One of the overriding assumptions is regardless of the efforts made by students, they want to get a passing grade. According to Drake (1941), it is examinations that often prevent this from happening. There is a recognition students do not want to fail irrespective of their efforts, and therefore ingenious ways are often explored to prevent failure. Often times students’ actions lead to academic misconduct.

The search to find clues to students’ attitudes toward cheating has been around for a long time. This study has traced academic misconduct since the mid-1920s but there is recognition that this kind of behavior among students, male and female alike, has been around for many centuries. Anderson (1957) explained that female students were found to cheat less than male students. He cautioned that female students may be more moralistic than males toward cheating and consequently they might become more defensive when they have to provide an opinion on the subject of cheating (p. 586).

Anderson stated his conclusion:

In the rating of twenty-eight situations originally labeled as cheating, university students expressed attitudes that certain ways of behaving are definitely cheating and that certain other ways of behaving are but slightly better on a moral basis. But not all situations were considered cheating; certain ways of behaving are thought of as being desirable. Thus a hierarchy of what constitutes good and poor study and test behavior does exist. (p. 587)

Anderson's (1957) findings also showed that male students were less predictable in their attitudes toward cheating than female students (p. 586). It appears there are variations of responses in terms of academic programs being pursued by participants in the study. To the extent that this is true, it serves as one example of the reasons arts and science female students would be less tolerant about cheating than female education graduates. In contrast, in a more recent study among college students ($N = 380$), Al-Qaisy (2008) found "males use procedures of cheat more than females in exams, reports and papers" (p. 144). He reported "females are more committed to the regulations of the university in regard to cheating and the studies indicating that males are more likely to cheat are common" (p. 144). However, the single most important criticism of the Anderson (1957) study is that it did not indicate how he arrived at his conclusion, nor did he address the basis upon which the sample was selected. In relation to sample selection methods, Kalton (1983) points out that probability sampling over non-probability does provide varying degrees of analysis and interpretation.

The 1960s brought their own set of problems without discarding the lessons learned in the previous decades. With academic dishonesty not relenting to good order and academic honesty, various researchers attempted to come to terms with issues such as falsification of examination marks (Black, 1962), an exploration of the sub-cultural influence on academic behavior (Ramsey, 1962), college cheating in terms of situational variables (Hetherington & Feldman, 1964), scholastic dishonesty (Bonjean & McGee, 1965), and academic integrity and its impact on social structure (Harp & Taietz, 1966). A repeated conclusion of these studies shows that students do think that it is acceptable to cheat under certain circumstances.

What is unclear from the studies identified in the preceding paragraph is whether exposure to ethics would provide students with a clearer understanding of what is right and wrong. However, even within these studies there are some contradictions as articulated by Steininger, Johnson, and Kirts (1964) who wrote:

In view of the interpretation that students are basically aware that they are doing wrong, it may seem puzzling that Guilt does not increase as Copying and Letting others copy increase. To feel and admit guilt, however, would be to say that one's behavior is not justified, which would contradict the subjects' view that cheating is justified under certain conditions, precisely those in which they say they would cheat most. (p. 323)

One of the criticisms of the Steininger et al.'s (1964) and Steininger (1968) findings is that the study was done at a university that did not have an honor code system. Therefore, one would not know whether those conclusions were generalizable to universities that have an honor code system. Another criticism is that although their study (Steininger et al., 1964) concludes "grades achieved with cheating may lower self-esteem" (p. 324), there was no earlier reference to this variable (self-esteem); the suggestion is not supported in their findings. Notwithstanding, a positive attribute of the Steininger et al. (1964) study is it demonstrates unequivocally that academic dishonesty is a behavior that some college students exhibit as early as their freshman year.

In the 1970s, Carbone (1970) provided some perspective to the need to attack this epidemic in the university system before it takes greater root. Carbone stressed the need to start the process of socializing young minds—a process that he argues must begin in the classroom—yet not abandon the older minds, which he argues must be exposed to "critical ethical inquiry" (p. 598). There is a clear indication that Carbone saw the need for an introduction of moral education as part of the curriculum both in school systems and in higher education. One of the problems he stressed however is acknowledgement

that character education is long overdue, there is “great difficulty in working it into our education system” (p. 598).

There are contrasting views as some people feel that any training in moral education must begin at home (Carter, 2005) and not be shifted to the teachers. Carbone concludes that if there is tacit agreement for teaching moral education, it will have implications for how teachers are trained. He fervently believes that if academic misconduct is to be eliminated, moral education must be integrated into the school curriculum.

Several researchers (Houston, 1978; Houston & Ziff, 1976; Vitro & Schoer, 1972) have made it abundantly clear that cheating will occur among students depending on the situation present at the specific time. Baird (1980) concluded he was not surprised that cheating had increased. He expressed the view that moral infection was not a significant issue and discounted its importance in his study. Baird was more concerned that cheating had become more contagious as more students appear to be taking this route as the normal way to complete their academic programs because “college students do not see cheating as unusual ... most [students] feel cheating is morally wrong and may feel guilty about it, but they practice it anyway” (p. 520).

Baird (1980) provided some introspection of the patterns applicable to the beginning of the 1980s. He questioned the relationship between character traits and the incidence of academic dishonesty and asserted there was little evidence to support the notion that character is intertwined with student behavior. In examining patterns among college students, Baird took the position that the extent of academic misconduct, depends on certain situational factors. For example, if students were writing a tough examination,

crammed in a small room, with no one to supervise them, this might present an opportunity to cheat.

Midway through the 1980s, researchers took a new turn and began to focus on some of the ethical issues of students' academic misconduct. The scene was becoming more populated by ethics researchers (Beltramini, Peterson, & Kozmetsky 1984; Bok, 1982; Eisenberger & Shank, 1985; Epstein, 1989; Norris & Gifford, 1988; Ward, 1986) who attempted to rationalize behavior in terms of the dilemmas students face as they transition from the college environment to a corporate employment, an argument that will be explored in other sections of this study.

The 1990s were ushered in with a continuation of the discussions on academic ethics. The discussions ranged from the legal aspects of academic misconduct such as the issues of due process and types of sanctions to be imposed (Bricault, 2007) to various dimensions of unethical practices by students such as cheating, plagiarizing, and abusing technology (Fawkner & Keremidchieva, 2004). It became clear that there was an urgent need to arrest this epidemic before it caused further damage to educational institutions, particularly those of higher learning (Buckley, Weise, & Harvey, 1998).

Historically, researchers looked at the problem of academic misconduct more from a generic viewpoint, for example, the frequency of cheating, and appeared to be content with the notion that cheating and plagiarism were indeed on the increase (Thompson, 2006). In the latter part of the 1990s however, there was a realization that the propensity of cheating was different between male and female students (Ameen, Guffey, & McMillan, 1996; McCabe & Bowers, 1994; Whitley, Nelson, & Jones, 1999). None of the findings provided adequate reasons for the differences in gender behavior. It soon

became clear that academic dishonesty and unethical practices were not confined to any specific program of study. There was cheating in medical schools (Sierles, Hendrick, & Circle, 1980), in business schools (Brown, 1995; McCabe & Trevino, 1995; Sims, 1993), in academe (Tom & Borin, 1988), in information technology (Sheard, Markham, & Dick, 2003), in education (Ferrell & Daniel, 1995), in engineering (Brown, 1996), in economics (Kerkvliet, 1994), and in pharmacy (Bates, Davies, Murphy, & Bone, 2005).

Daniel and King (1997) discussed the importance of self-esteem and how it affects students' behavior. They argued "reduced self-esteem may inhibit academic achievement, an outcome that has been positively correlated with perceptions of self" (p. 78). Daniel and King concluded "inclusion programs may not necessarily help to raise students' self-esteem" (p. 79). Taken as a whole, however, there appears to be some hope that raising students' self-esteem may reduce the possibility of educational failure among students (Mecca, Smelser, & Vasconcellos, 1989). Mecca et al. conclude a connection between self-esteem and behavior. One of the most thought provoking arguments was put forward by Crown and Spiller (1998), who provided a comprehensive review of cheating in colleges based on 25 years of research. They found issues relating to the quantification of the extent of cheating across studies. Crown and Spiller suggested that because each study provided its own percentage in terms of quantifying academic dishonesty, it was erroneous to give a broad interpretation "without regard for important boundary conditions" (p. 694). They asserted there could be some biases in accuracy of trying to quantify academic misconduct and so the issue of the validity of self-reporting may influence the accuracy of any percentage reported. Crown and Spiller fervently believe that self-reporting is important to any discussion on validity and stated:

If behaviors are at higher levels of societal, professional, or institutional acceptability, self-reports may be a fairly accurate appraisal of actual behaviors, which if in error may err on the side of over-reporting. Conversely, if behaviors are at the low end of acceptability, self-reports may under-estimate actual behavior. (1998, p. 696)

Despite the challenge to the contentious argument on self-reporting, the authors did not provide an alternative in terms of how prevalent behaviors could be recorded. The assumption has to be made that responses are truthful and that they provide a reasonable measure of each response.

McCabe, Trevino, and Butterfield (1999) sounded the alarm that academic dishonesty was increasing and that it had become a worldwide epidemic. Similar views were endorsed by Desruisseaux (1999) who stated cheating and plagiarism were found everywhere, both in the United States and overseas. Yet a slightly earlier study (Crown & Spiller, 1998) refuted any increase in academic dishonesty. Instead, Crown and Spiller approximated the discrepancy to varying time periods of each study and the methods employed to obtain the data. Crown and Spiller found no argument to substantiate findings such as McCabe et al.'s (1999) claim which purports an increase in academic dishonesty, and what reasons contribute to such increase.

A recapitulation of almost 80 years of literature (1920s through 1990s) on academic student misconduct reveals that academic misconduct is not a new phenomenon. Essentially, the literature has moved from an examination of the character traits of cheaters as well as potential cheaters to some of the factors associated with academic dishonesty. Likewise, one of the lessons learned in this period is that there are varying thoughts of how widespread academic misconduct may have been at any time. The issue of an honor code system, though only infrequently mentioned, represents a way

to better understand the relevance of a code on academic integrity. The presence of an honor code system could influence how students behave (Kidwell, 2001; McCabe et al., 1999). However, there is insufficient evidence available to determine the impact that honor code has on academic dishonesty.

Another key lesson learned from this period is that some students in almost all majors (e.g., business, engineering, medicine, economics, liberal arts) in one way or another engage in academic misconduct. One of the critical omissions of this period has been the investigation of the extent to which instruction in ethics may influence students' thoughts, actions, or consideration as they contemplate engaging in certain forms of misconduct.

Current Period—2000 and Beyond

The intent of this section is to discuss some of the major findings of students' academic misconduct that have taken place recently. It also explores research findings to include new paradigms and shortcomings with respect to students' behavior.

As the section evolves it should become clear that although much of the literature discusses the issue of academic misconduct in the United States, countries such as England, Canada, and Australia are beginning to talk openly about academic dishonesty. Alternatively, another way of interpreting this openness is it could be a function of what literature is available. As Desruisseaux (1999) puts it, "a disturbing and fast growing problem now plagues education around the world: academic fraud" (p. A45). There is greater awareness among several universities across the globe that student misconduct will destroy the credibility of these institutions (Allmon, Page, & Roberts, 2000).

Against the backdrop of ethical problems in the business sector, Allmon et al. (2000) explored some of the factors that have plagued business students influenced by academic misconduct (e.g., cheating, copying and pasting without proper citation). They argued that issues in the classroom relate very closely to what happens in the business community (p. 411). In relation to the need for change, Maxwell (2003) provided similar views when he indicated “there is an increasing desire for ethical dealing in business” (p. 6). Allmon et al. (2000) suggested that although factors such as gender, country of origin, and personality were important, the most dominant factors related to classroom ethical behaviors were age and religion. They concluded their findings were similar to earlier studies done by Forsyth and Berger (1982), which suggest “ideology was not related to [behaviour] behavior” (p. 56).

Although somewhat contradictory, an earlier study done by Forsyth (1980) indicated idealism and relativism do affect people’s behaviors. However, this finding will be discussed in the section on ethical framework and ethics theories on academic misconduct. The year 2000 will be remembered by educational institutions, business leaders, and politicians as the year that attracted tumultuous discussions on ethics (Hendershott, Drinan, & Cross, 2000; McCabe & Pavela, 2000; Rawwas & Isakson, 2000). McCabe has become the leading writer on students’ misconduct based on numerous studies (McCabe, 1992; 1993; McCabe & Bowers, 1994; McCabe & Pavela, 2000; McCabe & Stephens, 2006; McCabe, Trevino, & Butterfield, 2002; Roth & McCabe, 1995).

Over the period of his research, McCabe demonstrated unequivocally that academic dishonesty among students was one of the most menacing challenges to the

education system. One of the reasons is that it threatens scholarship as well as the validity of academic performance. Although some critics may argue that the various findings may be a function of when the research was done, we should not lose sight that there are unresolved academic problems, particularly among students in higher education (Robinson & Moulton, 2005).

In the beginning of 2001, most discussions on academic dishonesty centered on the proverbial damages to the education system. At least one study (Wajda-Johnston, Handal, Brawar, & Fabricatore, 2001) argued that academic misconduct extends beyond the undergraduate level. Wajda-Johnston et al.'s study provided a glimpse of hope in that although not explicitly stated, doctoral students fare better in academic honesty than master's level students. There is some realization at the doctoral level that creativity and originality are important factors for the advancement of scholarly work. In any case, academic dishonesty at the doctoral level will have dire consequences on careers.

Brown and Howell (2001) elevated the discussion on academic misconduct from a mere knowledge that cheating exists to a realization that action needs to be taken to prevent further erosion of the education system. They questioned the extent to which policy statements change students' perspectives on plagiarism. Brown and Howell (2001) wrote an article in response to academic misconduct in the form of academic fraud, which had taken place among athletes at the University of Minnesota, and asserted "educational institutions should publish statements on academic dishonesty, giving clear definitions and guidelines on how to avoid inadvertent plagiarism" (p. 104). They reported finding positive evidence on the severity of the problem among students to whom plagiarism statements had been read, even though the students regarded the matter

as being serious. Brown and Howell (2001) stated their position with respect to the efficacy of a policy statement on plagiarism:

All the respondents showed remarkable consistency in their understanding of the necessity of citing sources, with a large majority of respondents reporting that it was absolutely necessary to cite a textbook from which text had been copied or paraphrased. This finding further supports the contention that the effect of educational information was probably not to change the respondents' understanding of the definition of plagiarism but rather to change their perception of the severity of the problem. (p. 115)

Brown and Howell (2001) did not explain whether the students' perceptions would have changed had they been exposed to a course in ethics, or how this would influence the students' moral values.

As the debate continued, it became apparent that although researchers had agreed on the existence of academic misconduct, there were inconsistencies in terms of the findings gleaned from each study. One of the most contentious issues appeared to be whether academic dishonesty was increasing or decreasing with the passage of time. For example, prior to 2000, McCabe and Bowers (1994), Cole and McCabe (1996), and Baird (1980) all pointed to an increase in the level of academic misconduct. Their claims, however, were refuted by Brown and Emmett (2001) who found no evidence of an increase in academic dishonesty. Their findings were supported by earlier research undertaken by Spiller and Crown (1995).

In the period 2002 through 2008 there was a flurry of publications focused on gaining a better understanding of students' misconduct. Discussions ranged from moral development in higher education (Damon, 2002; King & Mayhew, 2002; Swanger, 2002) to the call for the integration of business and ethics into the university curriculum (Arnold, Martin, Jinks, & Bigby, 2007; Culwin, 2006; Dahl, 2007; Dodd, 2006; Iyer &

Eastman, 2006; Rakovski & Levy, 2007). A common thread through these studies was that no discipline (e.g., law, engineering, accounting, finance) escaped being impacted by academic dishonesty.

In concluding this section on the developments of academic misconduct, which covers the period 2000 through 2009, one of the most intriguing questions is: Are there lessons to be learned? There is growing intolerance for plagiarism among both faculty and students. With the erosion of scholarship, there is a genuine concern that unless we attack this chronic epidemic that is rampant in universities, we run the risk of invalidating the diplomas we award (Bricault, 2007; Ellery, 2008; Engler, Landau, & Epstein, 2008; Fossey & Cutright, 2009; Olabisi, 2009). The question may become: Did the students genuinely earn the grades they received? Questions have also been raised in terms of whether institutions of higher learning are doing enough to prevent academic misconduct. It is a good thing that because of external threats, if nothing else, could force institutions of higher learning to institute more stringent policies in terms of what happens when students engage in various forms of academic misconduct.

Finally, Machan (1997) asserts that human actions are more clearly understood if one goes back to history. It provides a reference point so as to gain a better understanding of what may have influenced particular actions at the time. Clearly, it seems that if people in educational institutions forget the past, they are likely to make the same mistakes now and in the future. Universities need to take a firm stance on academic misconduct.

Business Students: A Comparison with Other Disciplines

This section reviews the literature and makes comparison between business and non-business undergraduate students with regard to the propensity to engage in academic

dishonesty. It explores the notion of whether education institutions accredited by The AACSB are less susceptible to academic misconduct than non-AACSB schools. This is important because of the mandatory requirement to teach ethics in AACSB accredited schools.

Why is it important to single out business students given the fact that there are students in other academic programs who cheat? The truth is that there is cheating in other disciplines (Glick, 2001; Passow, Mayhew, Finelli, Harding, & Carpenter, 2006; Sheard et al., 2003). To gain a better understanding of the discussions that follow, this section provides a working definition of who is a business major. Essentially, any reference to business students majoring in accounting, economics, marketing, finance, and management. Collectively we refer to them as business students. Where studies are pursued in other areas, for example, engineering, architecture, or medicine, those students are referred to either as non-business or as other students.

Although many studies were undertaken several years before the revelation of recent corporate scandals—scandals have always existed in history—the financial mismanagement of WorldCom and Enron has provided a grim reminder of the results of unethical behavior within and among businesses. Business schools are being called upon to introduce more ethics courses into their curriculum. However, yielding to such response will in part depend on who accredits the program, and relevance of the course to the business curriculum.

What is recognized in this study is that accreditation for schools matters. To put this in perspective, some business schools are accredited by, and are members of, the AACSB, while others are not. This study refers to one category of schools as being

AACSB accredited when they are members of AACSB. The other category of schools is referred to as non-AACSB. There is a lack of distinction in the literature in differentiating among schools by accreditation. The AACSB prides itself on being able to “help business schools meet the future with all the tools and information they require ...” (AACSB International, 2002, p. 3). This report was concerned with the fact that management education is at risk and that there needs to be greater relevance between what is reflected in the business schools’ curriculum and what business leaders expect.

Although there is insufficient evidence to substantiate the point that ethics education will produce more superior business students over non-business students, there are several colloquiums that come together each year to solidify the synergy needed between business leaders and academic leaders (Anderson, 2008). There has been recognition that most business leaders will likely come from business schools so it is important that the curriculum reflect certain courses such as finance, marketing, and critical thinking skills, but it must be relevant as well. Likewise, the AACSB feels that business schools have a responsibility to society. The AACSB’s report on ethics education is instructive on the importance of forging the relationship between business schools and corporations (AACSB International, 2004, p. 9).

Weber and Duderstadt (2006, 2008) argue that there is a need to bring business education, research, and entrepreneurial activities closer to one another. They concluded that there is a need to deepen the strategies within higher education to take advantage of the paradigms needed to make education more relevant to the global market place. It is an admission that greater partnerships are required between business schools and businesses so there would be better business leaders evolving from the universities. It is the

universities that are being called upon to lay the foundation in management education. The AACSB International Report (2005) addresses the issue of management education and underscores the point that value is important especially when students are pursuing management education (p. 6). Therefore, transition to the corporate world relies on students getting a sound education in the principles and practice of management from the academic program they undertake.

There is a real concern within the literature that academic dishonesty appears to be higher among business students than other disciplines. Cox (2009) indicated that a study found that cheating was higher among business students than others. Meade (1992) reported, of students surveyed across three disciplines it was found that business students ranked the highest with 87%, engineering students came in second with 74%, and humanities students came in third with 63%. Similarly Mangan (2006), referring to a study done by McCabe, Butterfield, and Trevino (2006), it was reported that 56% of the business major students indicated they cheated ($N = 5,331$). In the same report, 47% of non-business students cheated. In another study, McCabe and Pavela (2004) suggested we “give students significant responsibility to promote and protect the highest standards of academic integrity” (p.13).

Allen, Fuller, and Luckett (1998) discussed the behavior of business students related to cheating and reported that earlier studies (Bowers, 1964; Drake, 1941; Goldsen, Rosenberg, William, & Suchman, 1960) had shown that cheating was increasing. Although each study shows varying degrees of cheating, all agreed some level of cheating has occurred among students. Allen et al. (1998) provided evidence to show that based on the work of Nelson and Schaeffer (1986) those numbers might have been

inflated. The contradiction in the report by Allen et al. is that cheating among business students, based on the work of McCabe (1992), is at the level of 87%. However, Allen et al. conceded that because of the absence of a universal definition of academic cheating, this could have accounted for the wide discrepancy among the various studies.

Although the study by Allen et al. (1998) confirmed there was cheating among business students, because of a lack of understanding in students' minds as to what cheating is, doubts were raised about the extent to which the information on the prevalence was valid. The study by Allen et al. (1998) cautioned that faculty members need to be aware and prepare to take action against students who cheat. The existence of cheating shows that there are ethical concerns and these simply will not go away. Therefore, a conscious effort must be made by everyone involved (students, administrators, parents, and instructors) to tackle this epidemic, which has plagued nearly every facet of our education system. Regrettably, students may forget what is involved in earning their grades honestly.

Brown (1996) provided an excellent account on making the comparison among business, education, and engineering students at the undergraduate level. He asserted that at the undergraduate level, business students engaged in more misconduct than students of other disciplines studied. In contrast, Bowers (1964) found that the highest level of student misconduct was among business students with a rate of 66%; levels of 58% and 52% were reported for engineering and education students respectively.

The findings in preceding section were similar to those reported by McCabe and Trevino (1995), whose study shows that among students who had 11 intended occupations, business students had the highest rate (76%) of academic student

misconduct (p. 209). They contended that “one of the most discouraging findings in the student phase of their research was that students who aspire to a career in business consistently reported the highest level of academic dishonesty” (p. 209). However, a deficiency of the study was that the frequency with which academic dishonesty occurred among business students was not revealed beyond the fact that business students were more culpable than those pursuing other undergraduate major (e.g., engineering/science, humanities/social science (p. 210). Contrasting findings were provided by Iyer and Eastman (2006) who investigated the idiosyncrasies that exist among business students and students of other disciplines. They sought to determine the extent to which business students are different from other students. Iyer and Eastman concluded that “business students did not cheat more than did non-business students” (p. 108).

The findings of Iyer and Eastman (2006), which compared business and non-business students, were similar to that of Brown’s study (1996). These two studies contradicted the findings of Bowers (1966) and McCabe and Trevino (1995), details of which were discussed in the preceding paragraphs. It is unclear whether the findings were influenced by the fact that the survey was conducted at a university accredited by the AACSB. One of the AACSB’s rules is that ethics must be included as part of the business program (Chapman, Davis, Toy, & Wright, 2004). It is unclear whether the existence of an Honor Code (Arnold et al., 2007) influenced the extent of academic misconduct conveyed in the findings of Iyer and Eastman.

Brown and Saunders (1999) sought to determine the extent to which undergraduate accounting majors were engaged in academic misconduct and to ascertain whether they were more likely to cheat than other business students. Brown and Saunders

(1999) conceded “they did not find accounting majors to be more ethical than other business students” (p. 41). Interestingly, while the Brown and Saunders (1999) study ($N = 51$) was non-committal about the extent of academic misconduct that may exist among business students and non-business students. However, a more recent study by Carpenter, Harding, Finelli, Montgomery, and Passow (2006) revealed that engineering students were less engaged in academic misconduct (82%) than business students, who had a rate as high as 91% (p. 181). Because researchers do not consistently describe the sample to which the percentages refer, the only inference that can be drawn is that the higher the percentage, the greater is the degree of cheating, and that the concept of questioning was consistent.

In summary, because of the relatively few studies done, with contradictions emerging in various studies, and lack of supporting evidence, it is inconclusive whether greater levels of academic dishonesty exist among business students when compared to non-business students.

If Ethics Instruction Influences Academic Integrity, Can We Teach It?

Any response to this question would need to reflect on how to teach appropriate ethics. In reviewing the need to teach ethics, the Institute of Society, Ethics, and the Life Sciences (Hastings Center, 1980) examined how the teaching of ethics could be incorporated in the undergraduate curriculum to improve academic honesty. The Institute recognizes this as a long standing problem, and summarizes:

The history of teaching of ethics in American higher education is long, interesting, and complicated and can only be roughly and broadly characterized here. And behind its history in the United States is its even broader history in Western civilization as a whole. One recalls that in the Greek academies, in the Talmudic schools, and in the medieval universities, the study of ethics, and

particularly the application of ethics to specific, everyday problems, was considered a central part of education. (p. 17)

In returning to the original issue of the teaching of ethics, each profession will have its own position on what should be included in the curriculum. To theologians, the teaching of ethics is about keeping the commandments, for example, “thou shall not steal.” Writing on Christian ethics, Biggar (2008) indicated an increasing awareness of the need for moral reflections and the impact it has on the moral fiber of society. He concluded that religion has created a new conscience for the public, and the need for greater collaboration between academia and religion. From a theological perspective, Christian ethics can have a positive bearing on the outcome of some of the events that evolve from day to day. Similarly, Long (2008), a contributor to *Religion and Ethics News Weekly* contends the recent economic fallout could be explained theologically and could be traced to morality. He concludes the behavior of both individuals and chief executive officers (CEO) is not only *unholy*, but is also characterized by greed.

Maxwell (2003) recounted a conversation he had with one CEO on the issue of business ethics. In his response, Maxwell indicated it was unnecessary to disaggregate ethics into family ethics, business ethics, and other forms of ethics. He lamented the fact that it was this kind of fragmentation that has led to confusion over the true meaning of ethics. Maxwell further stated there were three causes of ethical dilemmas: “we do what’s most convenient,” “we do what we must do to win,” and “we rationalize our choices with relativism” (2003, pp. 2-3). Maxwell concluded “there are two basic paths to achievement a person can choose, you can go for gold, or you can go for the golden rule” (p. 102). He amplifies these by stating those who go for gold “base their values on their worth,” while there are others who “base their worth on their values” (p. 102).

Like religion, ethics can be influenced by a person's experiences, country of origin, conviction, culture, belief, and the group with which one is associated (Sutherland, 1939). This means that ethics or ethical action/behavior could have a multiplicity of meanings. Put another way, what is ethical in one country could be unethical in another. As people see things differently (true for many topics), it could be a challenge to teach ethics as a course in a formal educational setting. In any case, there needs to be some level of investigation into how instruction in ethics might impact ethical behavior among business students.

With the fall of WorldCom, Adelphia Communications, and Enron, business schools have come under immense pressure to re-think their curriculum on the teaching of ethics. Therefore, this section of the study explores whether we can teach ethics and discusses some of the challenges instructors are likely to face as they seek to educate students on the benefits of taking an ethics course. Although this is not the main aim of education, Paul and Elder's (2005a) writing on the functions of ethical reasoning asserted "developing one's ethical reasoning abilities is crucial because there is in human nature a strong tendency toward egotism, prejudice, self-jurisdiction, and self-deception" (p. 2). They concluded that ethics is an integral part of people's development as it influences them to be "fair-minded, courageous, insightful, imaginative, and conscientious" (p. 32).

Relevance of Grade Point Average (GPA) and Ethical Issues

GPA is one of the important benchmarks needed to enter graduate schools. Similarly, employers of choice (e.g., Fortune 500 companies, Big 4 Audit Firms, and some Federal government entities) usually recruit students with high GPAs (i.e., 3.50 and

higher). Therefore, at the undergraduate level there is every incentive to aspire toward a high GPA (McCabe & Trevino, 1995; Penn State, 2008).

Many companies do ask for GPA or request the transcript. GPA is also used as a criterion for obtaining scholarships and other academic awards. Given this as the case, there would be a relationship between employment and GPA. However, Curran and Greenwald (2006) conclude that whereas a high GPA is important for admission into graduate school, a high GPA is only important when students seek their first job (p. 25). Some researchers argue that academic misconduct is related to GPA. For example, students who maintain a high GPA are unlikely to cheat (Bunn, Caudill, & Gropper, 1992; Diekhoff, LaBeff, Clarke, Williams, Francis, & Haines, 1996; Lambert, Hogan, & Barton, 2003).

Some students will work honestly to get the best grades while others resort to unethical practices. It was Nolte and Harris (2002) who advocated that teenagers learned what they lived. This statement confirms that we do have the capacity to teach students how to discern what is right from what is wrong. In exploring the extent to which we can teach ethics, Machan (1997) explained “whenever people criticize human conduct, including a person’s ideas, ethical considerations are immediately involved” (p. ix). Because people come from varying backgrounds their own perception of what is right or wrong may become obscured by “their inherited ideas” (p. xi).

There are other guides in place to establish an acceptable norm on ethics. For example, Paul and Elder (2005a) stated that ethics can be viewed as moving in two directions. First, there is the tendency “to dehumanize and distort others. ... to serve our ends” (p. 30). Second, “we cover up our unethical nature through self-deception, and

become dishonest, deceitful, insincere, or disingenuous” (p. 30). Given that people have this propensity to possess self-serving traits, or unethical contradictions (Paul & Elder, 2005a), it does raise questions in terms of whether there are available standards to teach ethics.

The question Machan (1997) raises however is: How does ethics as a course differ from other courses? To put this in perspective he explains that other courses (e.g., history, chemistry, biology) are taught “as sources of information” and are taught in a systematic manner (p. 3). Maguire (1982) in his review on the teaching of ethics, pointed to the inseparability of ethics from “curriculum,” “institutionalization,” “professionalization,” “epistemology,” and the “community” (p. 474). Maguire indicated that at one college, the teaching of ethics was so important that it was the president who nominated himself to teach the course to college seniors. After a decade, Maguire reported the course lost its prominence and became an elective for sophomores (p. 475). He theorized the teaching of ethics at this specific college “fell victim to positivistic reductionisms and to the attempted shrinkage of all knowledge to a simplistic science paradigm” (p. 475). Maguire concluded that teaching ethics to undergraduates should be designed to lift moral awareness among students.

For ethics, the most striking difference in relation to other courses is that for the most part, students accidentally run into it when they either get into trouble or see other students engage in academic misconduct. Hurd (2004), in reporting on the teaching across education institutions he visited in Maryland, stated that it was good to see students as young as five years old being taught character education. However, it is the practical application that is important as educators strive to build character. As Hurd

reported, one teacher reminded her students “it isn’t necessary to blow out another person’s light to let your own shine” (p. 1). When ethics are discussed in an academic setting it sets the stage for a theoretical analysis that may clearly omit practical applications. Robinson and Moulton (2005) referred to this notion as “applied philosophy” (p. ix). They argued that there is an ongoing reconciliation taking place between theorists and practitioners. As practitioners make decisions in their various occupations, they are evaluating themselves to determine whether their actions are based on ethical principles. Robinson and Moulton, in justifying that there is a need to teach ethics, explain there are three developments that make the teaching of ethics appropriate—the way people conduct themselves, moral conscientiousness among people, and the way students see themselves when they enter the workplace. In examining the components of morality, Rest (1986) asserts that some personal costs are involved when the issue of morality arises. Admittedly, ethical issues are ever present because seldom will two people see things in the same way especially when they come from different backgrounds and have different customs.

With this in mind the question becomes: What is ethics? This area will be fully elucidated in the section that provides the theoretical framework in this study. Machan (1997) describes it as “a person’s ethical or moral makeup [is] his or her character, and fictional personages ... their values and general orientation toward life” (p. 6). One could conclude that as nebulous as it may be, ethics is embedded in a person’s character. This means that certain assumptions must be made.

What is Ethics?

Hira (1994) explains that ethics is “sometimes used to refer to a set of rules, principles, or a way of thinking that claims authority to guide the actions of a particular group” (p. 312). She further explains that on other occasions ethics, when defined, relates to how people ought to act. However, the converse is also true in that the principles guide the actions. Ethics is concerned with abiding by a set of moral standards in whatever actions we take in our daily lives. The issue of ethics is likened to the question raised by Hinman (2003) as he examined the problems related to the “harmful effects of asbestos exposure” (p. 135) when Americans became increasingly concerned during the 1970s. He concluded that from the utilitarian viewpoint, the choice must be made between the effect of the choices made and ensuring that the world is “a better place for everyone” (p. 168).

Merriam-Webster’s Collegiate Dictionary (2003) defines ethics as a set of moral principles that people are expected to follow. It also refers to principles of conduct to which people are expected to subscribe. In some professions, to assure ethical behavior, the principles are embedded in a “Professional Code of Ethics.” According to Hira (1994), three critical factors must be present in the definition of ethics, these being: (a) “a moral issue is present” when someone takes an action, (b) “a moral agent is a person who makes a moral decision,” and (c) an ethical decision is present when it is “both legal and morally acceptable to the larger community” (p. 313).

Ethics are concerned with people’s ability to discern what is right from what is wrong. Therefore, when individuals embellish their resume, overstate the number of eligible tax deductions, take office supplies without permission, record next month’s

sales in the current period, or vote multiple times in the same election, they are engaging in unethical acts. Ethics affect the choices that people make.

Machan (1997) asserts it is assumed that people have the capacity to make choices. The other assumption he makes is that people “can identify principles of conduct” (p. 12). In relation to the first assumption, people have a free will to make commitments and by doing so they can make decisions that result in behavior. Ethics is intertwined with morality and people often appear to use the two terms (morality and ethics) interchangeably (Machan, 1997). Machan supports the view that if something is to be termed “right” there must be some standard to which it should be measured. Machan further advances the view that “the principles of ethics involve basic moral values” (p. 29). Similarly, Hira (1994) makes the point “ethics is about how we ought to live ... it has to do with how we ought to act. ... and that there are ethical systems between different societies” (p. 312).

The foregoing discussions have set the tone to reflect on the real question: Can we teach ethics to students? Radest (1989) discusses how this objective can be achieved. He argues that part of the debate on the teaching of ethics arises out of public concerns that both teachers and the education systems failed to teach ethics in schools. Radest explores the extent to which we can teach ethics. He asserts “the well-behaved student exhibits the common sense virtues, but in experience, events force moral conflicts on us” (p. 2). McWilliams and Nahavandi (2006) assert that instructors can use case scenarios to teach ethics as opposed to the traditional method of teaching the course. They concluded when the case study approach is used in conjunction with experiential learning (i.e., debates) tremendous benefits will accrue to the students (p. 430). They cautioned that the

uniqueness of this strategy “requires instructors to have the skills for such activities” (p. 430).

In contrast to some views held by Radest (1989), Rozema (1982) questioned whether the teaching of ethics could be achieved without preaching values. She acknowledged that as individuals we struggle with our own biases and values. She advocated that in teaching ethics we could overcome controversy by looking at ethics through the cognitive microscope (hedonistic, legalistic, altruistic, and situational). Radest (1989) suggests that in the context of the modern world not all expectations of the virtue of ethics can be met. He advocates that it may be better to teach ethics using the Socratic model. Radest believes “schooling tempts us to protect by isolation, but isolation fails” (p. 3). Nevertheless, he feels that “teachers know the link between biography and classroom” (p. 3) because, as teachers, they bring the world into the classroom even if this is not officially shown in the curriculum. An important caveat in Radest’s work is that moral education is intertwined with ethical reasoning. He suggests moral education can be introduced into the curriculum without religious connotations. Although this pluralistic approach has its own ambiguities, it raises yet another question in terms of the extent to which we can teach virtue (Radest, 1989, p. 19).

There are other advocates (Carter, 2005; Hill, 1997; Leipzig, 1998; Stevens, 1993) who feel that some of the best practices of moral education should be considered as a desirable part of the education system. Dovre (2007) argues that because we know a real crisis (lack of morals) exists now is an opportune time to rekindle core values or virtues of the American people. He suggests we need to inculcate these values in homes, schools, businesses, and in government. Dovre concluded that core values can be

achieved through community service as well as through participation in school activities. Skaggs and Bodenhorn examined the effectiveness of character education by looking at the relationships among implementing character education, student behavior, and student achievement as part of the curriculum. They pointed out that because of the implementation of character education in schools there was “a noticeable improvement in character-related behavior,” “decrease in drop-out rates,” “and a decrease in suspension” (p. 83). Skaggs and Bodenhorn (2006) concluded that the inclusion of character education in the curriculum is not a panacea for all school-related problems (not the only problem) but “implementing it to improve student behavior and the overall climate of the school is quite appropriate” (p. 113).

Radest (1989) advances the view that because of anxieties and perceptions colored by our own experiences, desires, and needs, we often feel and see teaching of ethics as a threat that sometimes plunges us into fear or helplessness (p. 19). He concludes “in this complicated situation, some of us will continue to insist that our own answers and only our own answers are acceptable whether in school, home, or society” (p. 33).

To conclude this section we restate the question of whether ethical behavior can be taught or learned especially when there are divergent views on what constitutes ethics. The general conclusion is that as long as we avoid the controversial subject of religion when we teach ethics, we can recognize “the map is not the territory” (Radest, 1989). Therefore, the teaching of ethics, it seems, relates to character education that has its pillars built on self-respect, trustworthiness, and integrity.

Practicality and Effectiveness of the Honor Codes System

To what extent does an honor code system influence the incidence of student misconduct in institutions of higher learning (McCabe & Trevino, 1993)? The *American Heritage Dictionary* (Pickett, 2000) defines the honor system as “a set of procedures under which persons, especially students or prisoners, are trusted to act without supervision in situations that might allow for dishonest behavior” (p. 844). Similarly, *The New Oxford American Dictionary* (2005) defines honor system as “[an] examination that relies solely on the honesty of those concerned” (p. 812). By way of contrast, while the *American Heritage Dictionary* includes the words “prisoners and students” one can only imply that *Oxford* is concerned with students because it mentions the word examination, as in the case of a classroom environment.

The administration of an honor code system varies from one institution to another. Some institutions’ honor systems are run by students such as at Princeton University (CT), Haverfort (PA) and University of Virginia (VA). Other universities such as Brigham Young (UT) and Vanderbilt (TN) have an institution-run honor code system. The latter two universities include deliberations on honor codes as a mandatory part of their opening ceremony for new students entering the university. Although the two approaches in implementing honor codes systems have the same objective, that is, to preclude academic dishonesty, the difference is in how an honor codes system is implemented.

The University of Colorado at Boulder states that its honor codes system is successful because students are in charge of writing and enforcing the rules (University of Colorado, year?). In addition, the University of Colorado reports that when it used the

faculty-run approach to the honor codes system there was little compliance from the students. The University attributed the low compliance with a lack of ownership in the honor code system by the students. Tripp (2006) explains that the honor code systems failed at Haverford College because enough students in the community did not ratify it. Vines (1996) find that schools with honor codes tend to have fewer cases of academic misconduct than schools without them (p. 352).

Further examination of the literature shows that essentially there are two categories of honor system—traditional and modified (Allen, 2004; McCabe & Trevino, 2002). The University of Virginia has an honor council run by students. This university is an example of a traditional honor code system. According to McCabe and Trevino (2002), in a traditional honor code system the responsibility for cheating or not cheating shifts to the students. The modified system features the extensive involvement of administrators and faculty as well as students to adjudicate matters relating to academic student misconduct (Allen, 2004). McCabe and Trevino explain that one of the attractive qualities of the modified code system is it seeks “to develop a sense of community responsibility for academic integrity, particularly among students” (p. 2).

Questions have been raised about the effectiveness of honor codes and whether there were differences in perception in terms of how instructors view their students (Cummings & Romano, 2002). Although Cummings and Romano found no evidence to support the issue of instructors’ perception of trusting students with adherence to the honor codes, it was felt there was greater “fear” among students in terms of academic dishonesty at institutions that had honor codes.

In an examination of honor codes in higher education, Konheim-Kalkstein (2006) reported that she implemented the honor system in one of her classes and found 25% of the students (class size = 43) expressed trust and respect for the presence of the honor code. Because of the honor code, about 61% of the students were either encouraged not to cheat, felt more trusted, or felt personally obliged not to cheat. Konheim-Kalkstein concluded “academic integrity is related to positive faculty evaluation [of the students]” (p. 176). Furthermore, she suggested “using a classroom honor code is advantageous for a professor—it can lead to increased flexibility—and potentially improve the student-professor relationship” (p. 178).

The issue of honor codes and their relevance in education is not new (McCabe & Trevino, 1993). Forman (1965), in an examination of events relating to the breaches of honor code violations at the Air Force Academy, became infuriated by the level of punishment for 105 cadets who were dismissed because of cheating. Although Forman recognized that the military academy was built on three main pillars—character, honor, and love for truth—he questioned the legitimacy of having treated the violations as a crime [in the military] (p. 485). He underscored the need to reinforce character education. Nevertheless, he conceded that the honor code was an integral part of military academies that “demanded compliance and enforcement of the necessary ethical system” (p. 490). Forman concluded “moral education cannot be achieved through dismissal of students, but through the discovery of modern and relevant methods of rekindling and reinforcing moral aspirations” (p. 490).

In assessing the implications of the cadets’ breach of the honor code and its implications for higher education, King and Bachtelle (1969) evaluated the value

structure of the Academy, what honor codes stood for, and the expectations of each student. They were more concerned about the wider implications of the effectiveness of an honor code system on higher education, not so much about the military academy and. questioned the appropriateness of a military honor code system in civilian organizations. As part of their closing commentary, King and Bachtelle articulated their position as follows:

We have used the 1967 cheating incident at the Air Force Academy as a vehicle for the consideration of certain values and ethical judgments in American higher education. What we would ask is: are there immutable, absolute values, rules, codes of honor commonly shared in all cultures, societies, or forms of human groups through time or space? Or has human organization become so complex, specialized, and multi-faceted that we must look to a realistic view of what constitutes honor, integrity and human decency, dependent upon the culture, the society, the ongoing situation?" (p. 457)

The schools discussed in the preceding paragraphs are some of the most prestigious institutions in this country. One of the overriding questions however, is does the presence of the honor code makes a school less vulnerable to academic student misconduct? Or, does it lessen the prevalence/occurrence of academic misconduct?

In exploring the issue of academic honesty and honor codes system, McCabe and Trevino (2002) reported that it was not uncommon for some people to ridicule the effectiveness and the relative impact of honor codes systems on students. There are divergent views among researchers on the importance of having an honor code system as part of the institutional structure (McCabe & Trevino, 1993; McCabe, Trevino, & Butterfield, 1999). University of Colorado faculty advisor to the Student Honor Code Council Professor Jeff Luftig cautioned that the problem of academic dishonesty will not disappear merely because a college or university has an honor codes system. He concludes that when used in conjunction with detection software systems like Turnitin, it

will bring immeasurable results. Persons against the introduction of the honor system clearly believe that such a system rewards students who cheat. Opponents of the honor code system argue that some students may get better GPAs and these same students may be accepted into the more prestigious graduate schools because of their high GPAs. In essence, it is as if there is an indictment on students who work honestly for their grades (Lee, 2009). Another shortcoming put forward by opponents of the honor codes system is that it places students in an awkward position in that they have to report on their peers.

McCabe and Trevino (2002) suggest that both the traditional and the modified systems of honor have “an ethical appeal to students” (p. 2). If for no other reason, students feel that having an honor code helps to foster greater trust between students and faculty (Zernike, 2002). There is recognition, however, that the existence of an honor code system is not a panacea for all forms of academic misconduct. Nevertheless, McCabe and Trevino fervently believe that building a positive culture, which could take years, is important to the integrity of an educational institution. They contend that by engendering culture “it may be the lifelong benefit of learning the value of living in a community of trust” (p. 6).

Conformity and Deviance Theories on Academic Misconduct

Academic student misconduct represents one of the most serious concerns among faculty members as well as institutions of higher learning (Al-Qaisy, 2008; Arenson & Gootman, 2008; Ellery, 2008; McCabe & Stephens, 2006; Pino & Smith, 2003). Rimer (2004) writing in *The New York Times* explains that academic misconduct, whether cheating or plagiarizing, can become embarrassing to both faculty and students alike. She

concludes there are consequential impacts whenever there is a breach of academic integrity and scholarship (p. B9).

Zernike (2002) writing in *The New York Times* emphasizes that many universities are using the honor code systems to mitigate against the incidence of academic misconduct (p. A10). The salient point is that because students sign honor code statements upon entering the universities, they are to be held accountable for their actions. Hence, students who fail to conform must pay the price for their misdeeds. This is a reminder of the level of academic dishonesty that exists in the system.

We now need to turn our attention to psychology. The main question is: Is there a psychological framework to explain the practices of academic misconduct? If the answer is yes, to what extent will ethics/ethical theories help to better understand why some students pursue academic dishonesty? To the extent that this is possible, is there evidence to suggest that a course in ethics will have some influence on students who cheat or who contemplate cheating?

Self-esteem is examined as there is a notion that if people have self-pride then they will have confidence in their own abilities to accomplish things for themselves. They feel good about themselves and their confidence level increases from one situation to the next. Typically, these persons are always anxious to convince others that they have the ability to rise to certain challenges no matter how difficult those may be (Beane & Lipka, 1986; Coopersmith, 1967).

To help put these questions in a context, four main theories and sub-theories will be discussed and assessed in terms of their relevance to academic student misconduct. These include Ethics Theory, Self-Esteem, Differential Association or Social Learning

Theory, and Labeling Theory. These four theories were chosen because they relate to behavior and people's value systems.

Ethics Theory

Academic misconduct can be examined under the auspices of ethics theory. If one accepts it is wrong to copy from other students, plagiarize other people's work and treat it as one's own, and cheat academically, then it is relatively straightforward to see why ethics theories are appropriate as the platform upon which academic dishonesty rests. One approach in ethics is about being able to distinguish what is right from what is wrong. Robinson and Moulton (2005), thinking about the right and wrong of an issue, assert it is no different from "business executives deciding whether to market a product they think may be dangerous" (p. 1). Similarly, McNamara (2008) advances the view that ethics need to be managed in the context of how it fits in the decision-making process. For example, there is a dilemma, he argues, when business executives have to make decisions between cutting corners on product quality and meeting the deadline for timely delivery of the product. In the context of the academic arena, a student facing the risk of failing a course weighs this against the consequences of academic dishonesty and the risk of being caught.

Ethics is the discipline that addresses the issue of what is good and bad and its relationship with moral duty and obligation. Hira (1994) suggested that ethics refers to a set of principles and rules to which people are expected to abide. The *Merriam-Webster's Collegiate Dictionary* (1993) defines ethics as "the discipline dealing with what is good and bad or right and wrong or with moral duty and obligation" (p. 780). A more recent edition of *Merriam-Webster's Collegiate Dictionary* (2003) defines ethics as the

principles of conduct governing an individual or a group (professional). Ethics is a fundamental part of a value system of individuals, which as a concept helps people to make a differentiation of what is right and what is wrong. These notions are interwoven with ethical theory. Within the concept of ethical theories the question then becomes: Why should students act in an ethical manner? Philosophically, we can find this answer if we extrapolate from the foundations of the theories provided by Socrates, Plato, and Aristotle (Pfeiffer & Forsberg, 2005). The intellectual perspectives put forward by these ethical theorists underscore the need to understand that morality and honesty are important characteristics in the development of civilized human beings.

According to Denise and Peterfreund (1992), Socrates may best be described as “the first great moral philosopher of western civilization ...” (p. 1). In exemplifying the greatness of these early philosophers and what they stood for, Denise and Peterfreund explained it:

Flowing beneath every human action is the current of ethical significance, and in all ages and places, questions about moral conduct and moral principles are posed and answers attempted. ‘To be or not to be?’ is at its heart a question of ethics. And ‘Whether ‘tis nobler in the mind to suffer the slings and arrows of outrageous fortune...by opposing end them’—is indeed a difficult decision. (1992, p. 1)

Plato as one of the founding fathers of ethical theory brought his own perspective to bear on the issue of morality. Plato’s era, according to Denise and Peterfreund (1992), encountered significant “moral degeneration” (p. 8). As part of Plato’s ethical theory, human values are sacrosanct and in a sense represent a “morally virtuous person” (p. 10). According to Denise and Peterfreund (1992), Plato’s doctrines of teleology and the theory of ideas are significant to an understanding of ethics. Much of his philosophy, they argued, had its roots in the importance of knowledge and the need for people to be

“morally virtuous.” To the extent that fundamentals are achieved, it underscores the point made by Denise and Peterfreund that it is better to be a “just human” as compared with being an “unjust human.” Denise and Peterfreund (1992) related it:

In their dealings with the State: when there is an income tax, the just man will pay more and the unjust less on the same amount of income; and when there is anything to be received the one gains nothing and the other much. Observe also what happens when they take an office; there is the just man neglecting his affairs and perhaps suffering other losses, and getting nothing out of the public, because he is just... (p. 14)

The “just person” may seem to be punished for being morally virtuous, in the final analysis Plato stresses the importance of good prevailing over bad, and right over wrong. This is why academic dishonesty has no place in the Platonic philosophy, which seeks to promote wisdom, courage, and justice. Accordingly, there is no room for students to cheat and to engage in immoral and unethical behavior in Plato’s world (Denise & Peterfreund, 1992).

The morality of character is embedded in Aristotelian ethics. The themes dovetail into two important ethical theories: Utilitarianism and Kantian ethics. Sherman (1999) concludes the Aristotelian theory deepens the “inner state of virtuous character” (p. viii).

In examining the epistemological issues on philosophy and its relationship to ethics, Thiroux (2001) explains “the immoral person knowingly violates human moral standards by doing something wrong or by doing something bad” (p. 6). He contends there are two major approaches available if a person is to understand morality. There is the scientific or the descriptive approach, which focuses on “human behavior and conduct.” This approach explains why human beings act with their own self-interest in mind. Thiroux (2001) asserts that people gravitate toward their own self-interest because they are not concerned whether their action is right or wrong. According to Thiroux the

second major factor revolves around the philosophical approach, which embraces normative or prescriptive ethics and meta-ethics or analytical ethics (p. 7). Thiroux considers, in parallel, the arguments relating to “self-interest” (egoism), the “interest of others” (altruism), and being concerned with “other people’s interest” (utilitarianism) (p. 6). Summarily, he argues this approach is more prescriptive because it sets the standards for how human beings should behave. Therefore, this conceptual framework on ethical theory is most appropriate for the purpose of explaining academic dishonesty among college students because it provides some explanation in terms of why people behave the way they do. This statement is made against the background that it is wrong for students to cheat. Given the fact that ethics focuses on human behavior and the manner in which people conduct themselves, it is not difficult to see that ethics and academic behavior are interwoven.

Early theories on ethics utilized several approaches to rationalize why people behave the way they do. The utilitarian approach is primarily concerned with making a decision that leads to the greatest good for the greatest number of people. In relation to this approach, McNamara (2008) questioned whether in a competitive environment it would make sense for maintaining market share to use low cost foreign workers at the expense of the negative impact it would have on the United States economy. Moral rights are another approach upon which ethical theory is built. Robinson and Moulton (2005) point out there are inherent conflicts in this approach. Some of conflicts include “fund raising and maintaining educational quality,” “benefiting the public at large and benefiting the people who work in the institutions,” and “the goal of quality sought by the process and the well-being and happiness of those who are evaluated” (p. 2). McNamara

concludes that under the moral rights approach, it simply comes down to a question of right or wrong.

Although no single theory can provide all the explanations why students engage in certain forms of academic misconduct, Anderson and Davies (2000) assert “ethical dilemmas are complex and involve emotional responses ...” (p. 711). They concede that ethics does not have a universal logical connotation, but rather one derived from “context” and “discipline,” which can be particularly challenging when policymakers formulate and apply their own ethical model embedded in decision making (p. 716). Anderson and Davies’ (2000) concern with the issue seems to suggest that there are dilemmas when dealing with ethics and ethical issues.

The literature on ethical theories suggests because ethics pivots around the notions of “good” and “evil,” “wrong” and “right,” moral dilemmas play a dominant role even in the face of “conflicting obligations” (Ruggiero, 2003, p. 125). Ruggiero suggested that when confronting a moral dilemma “first determine whether it can be avoided altogether; in other words, whether it is a true dilemma or only an apparent one” (p. 125). He concluded that from the viewpoint of “true dilemma” it is important to choose the better of two goods; the corollary being choosing the better of two evils.

Bell (2002) once described ethics as a “profound meditation on achieving success with integrity” (inside cover). In addressing the issue of integrity he opined that during his tenure as a college professor, students were sometimes overwhelmed with the pressure to succeed. This in no way suggests that cheating is a symptom—it is a problem in the education system. From Bell’s perspective, because of his high ethical values he was able to reject many forms of temptation to which he attributes these words:

“Experience has taught me that the recognition and the rejection process, never easy, can be made feasible by modifying ambition’s drive with a carefully nurtured ethical component” (p. 9). Bell recognized that some decisions are difficult. Should the student faced with the risk of failure resort to cheating? Alternatively, should the student whose term paper is due the next day, resort to “cutting and pasting” from the Internet to complete the assignment? Not to compromise his position, Bell reminisced on his own dreams, what he stood for, his values, and his faith, none of which he was prepared to sacrifice. Bell’s ethical convictions did not allow him to engage in any forms of academic misconduct; as a student, he recognized that as part of the transition to adulthood it was not worth taking the risk, which could have diminished his dreams of success. In admonishing those who would be quick to take the easy route he stated:

Our lives gain worth when we recognize and confront the evils we encounter—small as well as large—and meet them with a determination to take action even when we are but certain that our efforts will fail. For in rising to those challenges, there is no failure. Rather, there is the salvation of spirit, of mind, of soul. (p. 177)

Universalism, a subset of Ethical Theory, represents a two-fold process. First, there is a need to determine whether or not a specific action should simultaneously apply to everyone regardless of circumstances. Second, there needs to be a determination as to what would happen if such action was administered. More importantly, how would you feel if you were on the receiving end (McNamara, 2008) of this action? Put another way, people must be prepared to take what they give when then the situation is reversed. In short, universalism represents the search to find a new meaning to one’s actions.

Self-Esteem: Performance in Higher Education

The principal focus of this section is to provide a background to understand the impact of self-esteem as an emerging theory on students' academic misconduct. The impact of self-esteem on education is not a new phenomenon (Beane & Lipka, 1986; Berenblatt & Berenblatt, 1994; Coopersmith, 1967). *Webster's New College Dictionary* (Agnes, 2007) defines self-esteem as confidence and satisfaction in oneself (p. 1301). In psychology, the term self-esteem is often used interchangeably with self-worth in that it reflects appraisal of oneself. Several definitions of self-esteem have evolved over time.

Branden (1981, 1994) asserts that people's estimate of themselves is the single most important factor to them. The way in which people think about themselves typically guides how they view things and ultimately affects their psychological development.

Branden (1981) argues "emotion is the product of an evaluation [of oneself]" (p. 109). In reiterating the importance of self-evaluation, Branden (1981) describes:

The nature of his self-evaluation has profound effects on a man's thinking processes, emotions, desires, values and goals. It is the single most significant key to his behavior. To understand a man psychologically, one must understand the nature and degree of his self-esteem, and the standard by which he judges himself. Man experiences his desire for self-esteem as an urgent imperative, as a basic need. (pp. 109-110)

In examining the importance of self-esteem, Branden (2001) articulates that experience and competence are two critical factors that people must possess if they hope to meet the challenges of life. He suggests that if for any reason people lack self-esteem, there is the tendency for them to fake it. He contends "man is not born with the knowledge of what will satisfy the need, or of the standard by which self-esteem is to be gauged; he must discover it" (p.110). In rationalizing the psychology of self-esteem, Branden (1981) searches for the relevance of why a person needs self-esteem. The short

answer to his inquiry is that self-esteem is a driving force to self-confidence, self-efficacy, and self-respect.

A discussion on self-esteem would be incomplete if it omitted Abraham Maslow (1943), a psychology professor who espoused the theory on the hierarchy of needs. He was among the first to recognize that people have certain needs that they would like to satisfy. At the bottom level of the triangle he depicted security, in the middle, self-esteem, and at the apex of the triangle, self-actualization. Self-esteem is driven by people's value. Admittedly, value is driven by culture, which varies from country to country. When triangulated, people become motivated to take certain actions (Nahavandi & Malekzadeh, 1998). For students this could mean employing various strategies, right or wrong, to get a passing grade on an examination. Silvy (1998) indicates that persons with high self-esteem feel good about themselves. In addition, she contends that positive thoughts can be encouraging while negative thoughts can be damaging to individuals. Self-esteem does have an impact on academic integrity in that when students have confidence in themselves, they will want to prove to others that they can do a good job in the classroom and in the workplace (Anzivino, 1996).

Branden (1981) argues that people make choices that ultimately affect their conscience not just for today, but forever. Hence, self-esteem is a character trait developed over time because no matter what happens "man cannot escape from the judgment of his own ego" (p. 125). This suggests that when people have self-confidence they are implicitly stating that they have the capacity to achieve and add value to a given set of tasks. It is feeling good about ourselves, which transforms to being able to make a positive contribution in life. This position is supported by Berenblatt and Berenblatt

(1994) as they assert that when people have positive self-esteem they feel good about themselves—they enjoy themselves.

Notwithstanding the arguments discussed in the preceding paragraphs, Crocker and Park (2004) indicated there are divergent views among researchers with respect to “the benefits associated with having a high self-esteem” (p. 392). They asserted that educational institutions in the United States have implemented several programs aimed at increasing self-esteem among students. Education policymakers hope that these programs will act as a catalyst in reducing drop-out rates and encourage students to acquire greater self-worth.

Similarly, Campbell and Foddis (2003) asked whether there is a downside to persons having high self-esteem. Although not specifically answered by their study, they extrapolated from the findings of a study by Crocker (2002) suggests successes and failures can be tied to self-esteem although such outcomes may come with a high price. Crocker and Park (2004) reported many studies have shown that people with “high self-esteem believe they are intelligent, attractive, and popular” (p. 392). The implicit assumption they argue is there are beneficial effects for people with high self-esteem while those with low self-esteem have “detrimental effects.” They contend there are inherent costs associated with the goal of pursuing self-esteem. Crocker and Park identified these as “cost to autonomy” (p. 399), “to learning and competence” (p. 399), “to relationships” (p. 401) and “to self-regulation” (p. 402). Questions were raised by Crocker and Park in terms of whether the cost of pursuing self-esteem was a function of the worth and value to which people are held accountable. They asserted “external contingencies of self-worth, which require validation from others, have greater costs” (p.

404). They suggested that internal contingencies, for example, religious faith and virtue, had a lower level of cost than external contingencies. They argued that people who made self-esteem their “ultimate goal” were more concerned with their own behavior and felt a greater need to succeed (p. 404).

In concluding, Crocker and Park (2004) felt that there are many benefits to be derived from developing self-esteem. One is that people with high self-esteem tend to be high performers and generally work toward being successful. As Branden (1981) puts it, self-esteem makes a worthwhile contribution to the process of life. Similarly, Daniel (2001) concludes, “reduced self-esteem may inhibit academic achievement, an outcome that has been positively correlated with perceptions of self” (p. 78).

Differential Association Theory

The theory of differential association was developed by Edwin Sutherland (1939) as a learning theory that seeks to explain the process by which a person gravitates toward committing a criminal act. The theory states that certain deviant behavior can be learned by associating oneself with another individual or group. Developed by Sutherland, an eminent criminologist, this theory was primarily applied to the sequence of events with respect to criminal behavior. How can we use a theory developed for criminology and penology to explain academic misconduct unless, for example, students stole GRE exams? First, the researcher hastens to say that academic misconduct is not a crime against the state unless something was stolen. However, it represents a breach of ethical principles held by educational institutions and society. Second, to engage in criminal activities represents a form of deviant behavior. Similarly, a student who engages in

academic dishonesty involves himself or herself in deviant behavior. To support this position, Erikson (1966) in defining deviance, explains that it is a phenomenon that relates to people's conduct, typically requiring the intervention of authorities such as the state, an institution, or other agencies.

Arising from this discussion, what is the similarity between criminal conduct and academic misconduct? The short answer is that both activities are learned behaviors. Hess, Markson, and Stein (1993) assert "deviant behavior is learned in primary groups and involves the same learning processes as nondeviant behavior" (p. 139).

Sutherland's Differential Association Theory has general applicability to students' academic misconduct because as criminals learn to perpetrate a crime, so do students find ways to cheat while in institutions of higher learning. What the two have in common is that they hope nobody catches them. Admittedly, they recognize there are inherent risks in the activities they carry out. The one common thread that runs through both groups is that this phenomenology (deviance) can be learned. As Sutherland (1939) points out, deviant behavior is both learned and learnable. Leighninger and Popple (1996) stated:

People learn criminal behavior through the groups with which they associate. If a person associates with more groups that define criminal behavior as acceptable than groups that define criminal behavior as unacceptable, the person will probably engage in criminal behavior. (p. 331)

The position taken by Leighninger and Popple (1996) is not difficult to see because Nolte and Harris (2002) explain that some teenagers learn what they live. Essentially, the message Nolte and Harris are attempting to express is, teenagers tend to imitate the persons or events they see around them. Nolte and Harris receive support from Calhoun, Light, and Keller (1989) when they assert "deviance is a product of socialization" (p. 176). Learning, they argue, can come from schools, peers, and family.

Sutherland's Differential Association Theory is built upon five main pillars as summarized by Hess et al. (1993, p. 139).

1. Criminal behavior is learned in social interaction with others and has no unique or biological or genetic basis.
2. It is within primary groups, rather than from the larger society, that one learns motives and techniques for committing crimes, reasons for conforming to or violating particular rules, and what behavior is permissible in which situation.
3. A person becomes a criminal when definitions favorable to the violation of law outweigh the unfavorable ones; that is, one becomes a criminal because there are more factors favoring such activity than there are opposing it.
4. The differential associations most likely to result in criminal behavior are frequent, long lasting, and intense, and they occur relatively early in life.
5. Learning criminal behavior is the same as learning any other behavior. For example, people who value money could become robbers, stockbrokers, or physicians.

Although Differential Association Theory is helpful in understanding that criminal behavior is learned, and so too is student academic dishonesty, both are products of socialization. Nevertheless, there are some limitations and criticisms in applying the theory.

1. The theory does not explain how it is that a student who has never been in the presence of "academic cheaters" commits an incident. This is similar to a person who becomes a criminal yet has never been in the presence of one.

2. Is the theory suggesting that people are likely to emulate the characters who they see in movies or in television programs? If the answer is in the affirmative, we need to absent ourselves from all these events and actions. There again, this would be part of the utopian world.
3. The theory tends to be prescriptive in terms of cause and effect. If you are around students who cheat, you will become a cheater. Or is this a part of the maxim that suggests that birds of a feather flock together?
4. What about actors and actresses who become heavily involved in portraying violence? Does it mean these people will become more violent in real life than others? The argument could be made that soap operas have some unethical behavior though it may not be violent. Some may say that athletes in contact sports (football, boxing, hockey, and rugby) are likely to become violent off the field.
5. The theory does not explain the spontaneity of what happens when some students suddenly decide to cheat their way through college.

The evaluation discussed above acknowledges that there are flaws in the theory.

In recent times there have been some modifications to Sutherland's Differential Association Theory (Hess et al., 1993) in the form of Social Learning Theory. In short, the theory explains that deviant and conforming behavior are learned through reinforcement. It was Burgess and Akers (1968) who vilified Sutherland's claim that learning certain behavior takes place in a primary group. In short, they discounted Sutherland's claim with respect to what happens in primary groups.

Labeling Theory

Labeling Theory represents one form of the Theories of Deviance. Labeling Theory is important because it seeks to provide some insight into why people do what they do. Historically, it has been argued that negative societal labeling has led to negative reactions in society, which has led to stigmatization of humans (Becker, 1963; Garfinkel, 1956; Lemert, 1951). In other words, if people are always told that they are dishonest even when they do the right thing, they may suddenly decide to respond by becoming dishonest. However, a more recent finding from Adams, Robertson, Gray-Ray, and Ray (2003) suggests “perceived negative labels were related to increased involvement in self-reported delinquent behavior” (p. 184). They conclude that labeling is a predictor of general delinquency (p. 184). Labeling Theory provides a theoretical basis to understand why some students deviate from expected norms, such as academic integrity, while other students conform to the rules of the game.

According to Hess et al. (1993), “labeling theory emphasizes the process of defining a person’s behavior as deviant” (p. 138). They argued that while the theory did not explain the reason for individual deviance, it created “group definitions and reactions” (p. 138). Becker (1963) argued that the process of labeling occurred when people begin to play out what others think about them. This implies that if a group labels an individual as an academic cheater, the theory is that someday the person so labeled will assume that behavior (Conrad, 1975).

Although Labeling Theory has been around for many decades, there are divergent views as to whether or not labeling is a cause or an effect of behavior. Cocherham (1979) asserted that Labeling Theory represents a kind of “behavioral variations” in people (p.

103). He suggested “labeling theory is based upon the concept that what is regarded as deviant behavior by one person or social group may not be so regarded by other persons or social groups” (p. 103). While Cocherham (1979) has defended his position that labeling is a result of deviant behaviors (not a cause), Becker (1963) lent his support to the concept that because the rules are set, any variation from what is considered the norm will give rise to deviant behaviors. Further, he stated that deviance was not related to “individual quality;” it represented the consequential influence of labeling. Bryant (1990) refers to this deviant behavior as a violation of the social norm or normative behavior. Similarly, other sociologists (Erikson, 1966; McCaghy, 1985; Riemer, 1981) view deviant behavior as being dysfunctional to the society.

The views presented by Scheff (1966) were found to be different from those of Cocherham (1979) and Becker (1963). Scheff advocates that labeling is a cause of deviant behaviors. He concluded “among residual rules, labeling is the single most important cause of careers of residual deviance” (p. 93).

In discussing the criticisms of the theory, Hess et al. (1993) made the following observation:

Critics of labeling theory have focused primarily on whether deviant behavior is created and maintained by labeling and not on the effects of labeling. Although a label may or may not directly affect the specific behavior to which it is attached, the interaction affects other areas of life. (p. 139)

An important question is: What is the relevance of Labeling Theory on academic misconduct? Lemert (1967) stated that a label attached to a person could have significant influence on the person’s behavior, which invariably leads to a self-fulfilling prophecy. This is one of the events that led Nolte and Harris (2002) to conclude that teenagers learn what they live. In their contribution, Adams et al. (2003) sought to determine the

relationship between deviant behavior and Labeling Theory. While the study focused on the phenomenon of delinquency, it seemed to have some relevance to academic student misconduct. They concluded “negative labels were related to increased involvement in self-reported delinquent behaviors” (p. 6).

Finally, whether Labeling Theory is viewed as either a product of cause or effect reaction, the theory could be applied to students’ behavior. There is wide acknowledgement that the theory was formulated to explain delinquency behaviors; this means that criminologists have dominated the discussions on Labeling Theory. However, the theory has also been used to explain the behavior of people with mental illnesses and others who have some deviant tendencies. It seems that the ways humans socialize, and the groups to which they attach themselves, do have some impact on how members of the group will behave. Although not everyone who becomes part of a group will necessarily be like the group, the colloquial phrase suggests birds of a feather will flock together. It seems that individual members of a group would have to tread cautiously to ensure that everyone, metaphorically, is able to walk between rain drops without getting wet; this means that persons should not be influenced by things (or events) around them. Hence, there is indeed some justification for Labeling Theory’s relevance and applicability to explain why some students engage in academic dishonesty.

In conclusion, the literature review has sought to put into context the nature of academic dishonesty, its emerging pattern throughout many decades, the two main components of academic dishonesty (i.e., cheating and plagiarism), influence of GPA, perceptions relating to good and bad conduct, related issues on labeling theories, and

issues relating to whether ethics can in fact be taught. However, one of the principal deficiencies relate to the influence of ethics instruction on academic misconduct.

CHAPTER 3 – METHODOLOGY

This chapter discusses the methodology associated with undertaking this study.

The principal purpose of this research was to determine what influence a course of instruction in ethics might have on students' academic misconduct. A non-experimental quantitative design was used because there were specific attributes to be measured.

Wiersma (2000) suggested that quantitative designs are more appropriate when there is a need to explain variables. For this study, 14 variables were examined: *ethics instruction, prevalence of academic dishonesty, awareness of academic conduct, reason for academic dishonesty, perception of academic conduct, character traits, honor code, academic conduct, parents' background, religion, self-esteem, AACSB/Non-AACSB, gender, and age* (Table 3.1 and Appendix A).

The items were designed to elicit responses that explained how instruction in ethics, taken as a course of study, might influence students' academic misconduct. The survey instrument contained 62 items divided into seven sections. Each section, clearly delineated, sought to elicit responses to items relating to attitude, cheating behaviors, personal traits, parents' perspectives through the lens of respondents, personal information, and self-esteem.

Research Design

In relation to study design, Kish (1965) identifies four criteria that should be considered: (a) the design should reflect the study's goals and objectives, (b) the extent to which data attributes can be measured so that meaningful conclusions can be drawn, (c)

to assure that the design has practical applications rather than being too theoretical in scope, and (d) to assure that the study can be completed within a certain timeframe and within certain financial limitations.

This study was designed to determine whether students' academic misconduct is influenced if they take a course in ethics, and if school accreditation (that is AACSB or non-AACSB) plays a role in students' conduct. In addition, the study assessed whether the outcome (academic conduct) was related to parents' background and religion, and the extent to which academic conduct was influenced by gender (male and female). Further, the study explored the association between students' awareness of academic conduct and prevalence of academic dishonesty. Similarly, the relationship between students' perception of academic conduct, character traits, and honor code, as well as and the relationship between self-esteem, parents' religion and students' academic conduct were explored.

Creswell (2005) explains that research designs use a process that incorporates the selection of a sample from the population "to describe the attitudes, opinions, behaviors, or characteristics of the population" (p. 354). In reviewing the appropriateness of when to use a survey, Creswell concludes that surveys are useful when the researcher is seeking to determine "the attitudes of individuals" (p. 354) toward certain events. Hence, in this study, there was justification to consider a quantitative survey as appropriate to determine the influence a course in ethics might have on students' academic conduct. For this study the sensitivity of the topic made it appropriate to use self-administered questionnaires because participants might have feel comfortable to complete an anonymous questionnaire than to divulge the information to an interviewer.

Further, as part of research design, Nardi (2006) explains that a research design represents a plan or a format that allows the researcher to transition from the identification of the research problem to the point where valid conclusions can be drawn. He concludes that a research method should be so structured that it provides enough information so other researchers can replicate the study (p. 221).

Factors such as convenience, willingness, and commitment from faculty and other external support staff were the critical factors that assisted with the timely completion of the study. More importantly, excellent rapport was established with faculty members at the universities where students participated in the survey, and this made the data collection process relatively easy.

There is no method of research that is free from criticism. In the final analysis, it is the trade-offs that researchers take into account. In a research design such as the one used in this study, the likelihood of bias was lessened, notwithstanding the sampling design used, because neither the researcher nor college faculty had influence over any of the students who participated in the study since students' participation was completely voluntary.

Population and Sample Selection

For this study, the sample was from college and university undergraduate business students. There is recognition that academic misconduct is ubiquitous, which provided a basis for including students from selected colleges in Georgia as well as the Caribbean. Furthermore, Fowler (2009) indicates that in relation to sampling frames, researchers need to evaluate "comprehensiveness" of the population, "the probability of selection," and the "efficiency" of participants being found within the frame (p. 21).

The target population for this study was undergraduate business students from nine IHLs in the Georgia (U.S.), and the Caribbean (Jamaica and Grand Cayman). These students represented business students who have different backgrounds and experiences. For example, students in Georgia have greater access to educational opportunities and resources than students in the Caribbean. Students from the Caribbean, some of whom come from very humble beginnings, typically, because of the limited number of universities and colleges available, a small percentage of the population continues through to higher education which has a high cost .

The participating IHLs selected for the study satisfied the following criteria:

1. At least three IHLs, but no more than six, were foreign-based (institutions located outside of the United States). The principal purpose was to validate that academic student misconduct is a global problem, not just related to the United States (Caruana et al., 2000; Chapman & Lupton, 2004; Newstead et al., 1996; Sheard et al., 2002).
2. At least three IHLs, but no more than five (excluding Caribbean-based universities), held accreditation from the AACSB granted no later than October 31, 2009.
3. At least three, but no more than six, IHLs were non-AACSB members as of October 31, 2009.
4. The participating IHLs had a minimum enrollment of 200 undergraduate business students. This was included due to the cost effectiveness of carrying out the survey.

5. The participating IHLs offered at least a two-year degree in business or a related program. Higher education in the Caribbean is approximately similar to United States in that undergraduate degrees are completed in three to four years of full-time study.
6. The participating IHLs provided students an opportunity to enroll in a course in ethics in the undergraduate curriculum. In at least one instance, ethics course taken by students were done as part of another course rather than being its own stand alone course.
7. Only IHLs that completed and returned the Intent to Participate form with a postmarked date before March 31, 2010, were eligible to participate in the survey. Although based on feedbacks 11 IHLs indicated they would participate, in the end nine actually did. The following IHLs gave permission for their students to participate in the study: Emory University (GA), Kennesaw State University (GA), Cheyney University (PA), DeVry University (Atlanta, GA), Mercer University (GA), Clayton State University (GA), McMaster University (Ontario), University College of Cayman Island (Cayman), University of the West Indies (Jamaica), the University of Technology (Jamaica), and the University College of Mico (Jamaica) (Appendix B). Because of lack of support from faculty, no surveys were administered at McMaster and Cheyney Universities.

In identifying students for the study, the Program Deans at each of the nine institutions were sent a formal written request to participate in the study. Program Deans were asked to provide a list of business classes, the number of available students, the name of the faculty coordinator who would assist with the administration of the survey,

and the most convenient day to administer the survey. The campus faculty/administrator (a volunteer) was identified in advance of the actual date of the survey (for each campus), and administered the survey at each participating university. Having this information facilitated the printing of questionnaires prior to the day of data collection.

There are many criteria for selecting a sample. Wiersma (2000) suggests that sometimes the researcher may have to use different methods to select the sample. One of the key factors to take into account in selecting a sample is the need to obtain the data in an anonymous way. Purposive sampling, a non-random, non-probability method was considered appropriate for this study. Purposive sampling allows the researcher, based on knowledge, to select the institutions appropriate for the study (Babbie, 1990, p. 97). Nevertheless, LaFountain and Bartos (2002) argue “this type of sampling can be very biased and is often not recommended” (p. 87). However, Babbie (1990) explains this method of sampling is acceptable particularly when probability sampling, a superior method of sampling, is both too expensive and impractical to administer.

In this study the sample included business students enrolled in or having completed a stand alone ethics course or it being part of another undergraduate level course. No student was mandated to participate in the study; nor did they receive extra credit or incentives for doing so. Because the students completed the questionnaire in class under the supervision of the designated survey coordinator, no provision was made for distance students or for students who were absent from class on the day of the survey to participate. Students were allowed to participate in the survey once. To reinforce this action, prior to the start of the survey, coordinators announced that students who participated in the survey given in an earlier class could not take the survey a second

time. The students complied with the coordinators' instructions. Therefore, there was reasonable assurance that each student participated only once in the survey.

Instrumentation

The accuracy of any analysis is reflective of the type of survey and data collection methods used "to meet the research objectives" (Fowler, 2009, p. 115). After a comprehensive review of the literature it was decided the uniqueness of this study warranted the creation of an instrument that reflected the attributes being investigated. None of the available instruments focused on the extent to which instruction in ethics influenced students' misconduct. For example, Cram (1998) made extensive use of the Personal Inventory Form (PIF) in the measurement of self-esteem. However, Cram was concerned with service learning and its relationship to self-esteem, an investigation outside the scope of this study.

Beyond including 10 questions from Rosenberg's Self-Esteem Scale (Rosenberg, 1989), the other 52 questions on the survey instrument were original because they were tailored to the goals and objectives of this study. Initially, when the first version of the instrument, which consisted of 45 items, was tested with students; some items contained "noise" and needed to be reworked. For example, items included more than one concept or were double-barreled. Still, some items were superfluous and were eliminated. To correct these deficiencies the number of items was increased. Successive iterations of the questionnaire were administered to small groups of students (not part of the sample). Students were given the opportunity to indicate what items they considered intrusive, ambiguous, or difficult to follow. After the conclusion of each questionnaire session, constructive comments were incorporated into subsequent versions of the questionnaire.

Inputs were obtained from experienced professionals as well as experienced faculty members.

The revised instrument used in this study (Appendix C) consisted of 62 items. Fowler (2009) explains that pre-testing of a self-administered questionnaire should be pursued to remove ambiguities and other noises from the instrument (p. 124). This approach is important in a self-reporting instrument as no form of assistance is available when students complete the survey. This customized instrument reflected items that would most likely provide explanations of academic dishonesty.

Nardi (2006) asserts that the wording of items is important (p. 76). As for the language, he fervently believes “items should reflect the educational level and reading language abilities of those filling it out” (p. 79). In this instrument administered to college students, the language was set at a basic level of reading comprehension, certainly no greater than that required of a high school student.

In Section One (Q1–Q14), students’ attitudes toward academic dishonesty were explored. Unless we know how students feel about cheating and other forms of academic dishonesty, no appropriate policy can be developed by education administrators to reduce or to eliminate academic dishonesty. This is important because there is a recognition that attitude can impact performance (Maxwell, 2003). Section Two (Q15–Q18) was designed to address cheating behaviors from the students’ perspective. It was important to learn how students think and what influences them to pursue acts of dishonesty. The main focus of Section Three (Q19–Q24) was to understand the personal traits of students involved in academic dishonesty and determine the frequency with which students cheat. Section Four (Q25–Q31) was created to gain students’ perspectives on how their parents

see education . The section also provides some demographics on parents. Section Five (Q32–Q41) was intended to create a profile of each respondent and collect information such as students’ age, gender, academic standing, and GPA. Section Six (Q42–Q46) explored the connection between academic dishonesty in college and professional behavior in the workplace. This exploration was particularly critical because the student population includes full-time, part-time as well as working adults attending universities. The literature was largely silent on the relationship between students’ behavior in college and their ethical behavior in the workplace. Section Seven (Q47–Q62) allowed the researcher to explore the relationship between self-esteem and academic dishonesty. In particular, participants were asked to indicate their responses to 16 Likert-type items all looking at self-esteem.

The instrument made extensive use of a 4-point Likert scale of strongly agree (4) to strongly disagree (1). There were 43 Likert-type items (66%) among the 62 items. Gliner and Morgan (2000) supported the view that when questions are designed in a way that facilitates a response using a Likert scale, data analysis is achieved more efficiently since an order is established for each response.

The seven sections of the study supported the 14 principal variables (see Table 3.1), which cross-matched with six research questions and three supplementary questions (Appendices A and D). In addition, the study had five hypotheses. Because the principal focus of the study was to determine the influence of ethics instruction on students’ conduct, Hypothesis 1 (i.e., there is a no relationship between ethics instruction and the prevalence of academic dishonesty) was crossed-matched to two important variables, ethics instruction and prevalence of academic dishonesty. Hypothesis 2 (i.e., there is a no

relationship between students' awareness and prevalence of academic dishonesty) assessed two variables, awareness of academic conduct and prevalence of academic dishonesty. These variables were cross-matched to Research Question 2. There was no hypothesis for Research Question 3 as it was descriptive. Hypothesis 3 (i.e., there is a no relationship between students' perception of academic conduct, character traits, and honor code) related to three variables, perception of academic conduct, character traits, and honor code, and was cross-matched to Research Question 4. Hypothesis 4 (i.e., students' academic conduct is not influenced by their parents' background and religion) included three variables, academic conduct, religion, and parents' background, which were also cross-matched to Research Question 4. Hypothesis 5 (i.e., there is a no relationship between self esteem and students' academic conduct) related to two variables, self-esteem and academic conduct, which supported Research Question 6.

Table 3.1

Description, Identification, and Meaning of Variables Table

NUMBER	VARIABLE	DESCRIPTION/MEANING
1.	Ethics Instruction	Completed a college course in ethics.
2.	Prevalence of Academic Dishonesty	Includes number of times students indicate they engaged in any form of academic dishonesty in college.
3.	Awareness of Academic Conduct	Have knowledge that even if a better grade is obtained it is socially wrong to cheat. This may have negative consequence (e.g., losing friendship, distorting credentials).
4.	Reason for Academic Dishonesty	Negative actions taken by students using dishonest means (e.g., get higher grades, retain financial awards).
5.	Perception of Academic	An intuitiveness or mental image that

NUMBER	VARIABLE	DESCRIPTION/MEANING
	Conduct	cheating is wrong not only in an academic setting but could affect one's ethical behavior in a professional career.
6.	Character Traits	Conveys positive qualities of persons who embrace actions such as endorsement of disciplinary procedures. It also includes lack of sympathy for persons who cheat.
7.	Honor Code	Represents an ethical standard or set of rules students are expected to follow.
8.	Academic Conduct	Adverse actions pursued by students (e.g., cheating on tests, plagiarism, intellectual stealing) which could be impacted by GPA, difficulty of program pursued, and student standing (e.g., freshman, sophomore).
9.	Parents' Background	Relates to certain distinguishing features of parents (e.g., education level, moral and financial support, career or occupation, interest in child's education).
10.	Religion	Influence of faith and religious values by parents in relation to students' action.
11.	Self-esteem	Relates to how students feel about themselves and their own values.
12.	AACSB/Non-AACSB	AACSB accreditation represents the highest recognition accorded to a business school, in addition to, regulatory education standards issued by U.S. Department of Education.
13.	Gender	Students' gender (male/female)
14.	Age	Distinction between younger (3 categories 18-32 and older students (>32)).

To isolate each of the 14 variables in the study, a series of items were delineated together with the applicable research items (Appendix D). The supplementary questions 1, 2, and 3 were descriptive in nature and were supported by five variables (*AACSB/Non-AACSB, honor code, academic conduct, gender, and age*). The applicable instrument items were Q5 and Q6 (honor code), Q9, Q34–Q36 (academic conduct), Q33 (gender), and Q32 (age). *Ethics Instruction* and *Prevalence of Academic Dishonesty*, were associated with Research Question 1, and are referenced to survey items Q19–Q22, Q37–Q38 (ethics instruction), and Q23–24 (prevalence of academic dishonesty). To measure *Awareness of Academic Conduct*, the variable was supported by Research Question 2, and was associated with research instrument items Q2, Q4, Q16–Q18, and Q39–Q41. Research Question 3 focused on one variable, the *Reasons for Academic Dishonesty*, and although it did not have a supporting hypothesis, it was cross-matched to instrument item Q10. The variables *Perception of Academic Conduct, Character Traits, and Honor Code* were associated with Research Question 4 and were represented by instrument items Q1, Q3, Q42–Q46 (perception of academic conduct), Q7–Q8, Q11–Q15 (character traits), and Q5–Q6 (honor code). The variables *Academic Conduct, Parents' Background, and Religion* were associated with Research Question 5. The variables were tied to instrument items Q9, Q34–Q36 (academic conduct), Q25–Q29 (parents' background), and Q30–Q31 (religion). Finally, the *Self-Esteem* variable, which was cross-matched to Research Question 6, related to instrument items Q47–Q62 and incorporated the original 10 items taken from the Rosenberg Self-Esteem Scale inventory (see Appendix E).

Validity and Reliability of the Instrument

Validity and reliability are important components of any study. An accurate and consistent instrument is needed to gain confidence in the results. The issues addressed included: (a) the accuracy of the measurement used, and (b) extent to which there is consistency in the results (Walonick, 2003). The researcher took these factors into account through pre-testing the instrument, and inclusion of overlapping items. Furthermore, the time related to the administration of the questionnaire was important because when people have time they will deliberately go through the items with care. This could result in more accurate responses (Fowler, 2009, p. 178). There was no evidence that students' rushed the survey since relatively few items were missed in the completion on the questionnaire. Each survey contained 62 items completed by 1,029 students (12 unuseable) with 66 data elements missing from the survey (non-response).

Validity comes first because without it reliability becomes a moot point. Validity is "the extent to which an empirical measure adequately reflects the real meaning under consideration" (Babbie, 1990, p. 133). Nardi (2006) explains "validity is about accuracy and whether the operationalization is correctly indicating what it's supposed to" [measure] (p. 58). Validity assesses whether the instrument is measuring what it says it is going to measure. Nardi asserts an inappropriate measure will lead to inaccurate results and conclusions. Fink (2006) explains that "a valid survey produces accurate information" (p.7).

In reviewing validity, McMillan (2004) articulates "locally devised instruments with little or no history or use or reviews by others need to be evaluated with more care" (p. 140). To assure the survey instrument elicited data upon which the researcher could

rely, a team of three experienced persons independently reviewed the instrument to assure appropriateness of items, multiple choice responses, and the validity of section designs. In addition, the questionnaires were pilot tested in at least one university located in Atlanta, Georgia.

Fowler (2009) emphasizes the importance of increasing validity through factual reporting of the results (p. 105). The survey instrument represents a useable document that incorporates many changes that were recommended. Fowler concedes that validity is a complex issue (2009, p. 112). The final version of the instrument used evolved as a result of actions described in the foregoing section. Therefore, the researcher is confident that the scales or measures used in this research are sound.

Reliability refers to the extent to which a particular research instrument given repeatedly provides similar results (Babbie, 1990). In addressing the survey instrument's reliability, the researcher's assistance team (comprised of three experienced persons) assessed the instrument for "appropriateness and usefulness of measurement" (Wiersma, 2000, p. 297). According to Fink (2006) "a reliable survey results in consistent information" (p. 7). Similarly, Wiersma (2000) defines reliability as "the consistency of the instrument in measuring whatever it measures" (p. 297). If we want reliable answers we have to ask people the things they know about, care about, and want to know about (Babbie, 1990). The tendency is that if you ask people the questions that the average person does not know, you are likely to get unreliable answers. The questionnaire was designed with these things in mind. Cronbach's alpha statistic was used to assess the internal consistency of paired variables to determine the extent to which items contributed to the overall reliability of the instrument (Morgan et al., 2004; Sprinthall,

2009). For example, in this study, the Cronbach's alpha statistic for honor code was 0.19 which suggests a measure of low reliability. Therefore, considerable caution must be exercised when using this specific scale.

Reliability was enhanced by having several items repeated in different formats so that students could think about what they were answering. For example, students were asked to indicate their agreement to item 1, "I view cheating as being academically dishonest." As a follow-up, students were asked to indicate their agreement with item 3, "I do not see anything wrong with academic dishonesty." In addition, the researcher's methodologist recommended changes to allow for more accurate measurement of the variables. Students are familiar with academic misconduct whether by direct or indirect involvement. Therefore, the students were asked to respond to items familiar to them. More than 66% of items required respondents to provide responses based on agreement (*strongly agree* and *strongly disagree*), which simplified coding and reduced coding errors.

"Reliable and valid surveys are obtained by making sure the definitions and models you use to select questions are grounded in theory or experience" (Fink, 2006, p. 7). This research recognizes the issues relating to validity and reliability and concludes, that it is important to have accurate measurements that can be replicated, and continue to yield the same results over time (Walonick, 2003).

Data Collection Procedures

This was an onsite *one-time* cross-sectional survey conducted with students in attendance at the IHLs on the days designated by each university's administrators. A non-paid survey coordinator for each of the nine participating universities provided assistance

to the onsite faculty member. For the most part, faculty members collaborated with the survey coordinator to assure the smooth administration of the survey. The cover letters, instructions from the researcher, and survey instruments were distributed to each of the nine participating IHLs (Appendices F, G, and H).

The questionnaires and the class schedules were made available to the survey coordinators who conferred with each instructor to determine the most convenient day to administer the survey. Every student present in a class on the day of the survey was allowed to voluntarily participate. Faculty members announced prior to the start of the survey that students who completed the survey earlier could not participate more than once. On average, participants took less than 15 minutes to complete the survey. Except for two students who did not return the in-class survey, the response rate was greater than 99%.

Based on the number of universities involved in the survey, it took approximately one month to complete the administration of the survey in all locations. At the end of each survey session, the designated survey coordinator(s) collected the questionnaires, most of which were deposited in the survey box provided in the classrooms. At the conclusion of the survey at each campus, the survey coordinator returned the completed questionnaires to the researcher. Once each survey coordinator returned the package to the researcher, their responsibility ceased.

Data Analysis

In Table 3.2, the researcher shows how the variables were analyzed.

Table 3.2

Cross-Match Data Analysis Table

RESEARCH QUESTIONS	VARIABLES	HYPOTHESIS	DATA ANALYSIS
1. Is there a difference in the prevalence of academic dishonesty between students who have had ethics instruction and those who have not?	1. Ethics instruction. 2. Prevalence of academic dishonesty.	HP1	Pearson Chi-square; Cross-tabulations
2. What is the association between students' awareness of academic conduct and the prevalence of academic dishonesty?	3. Awareness of academic conduct. 4. Prevalence of academic dishonesty.	HP 2	Mean; Standard Deviation; ANOVA
3. What are the reasons for academic dishonesty among business students?	5. Reason for academic dishonesty.		Descriptive Statistics & Frequency analysis
4. What is the relationship between students' perception of academic conduct, and character traits, and honor code?	6. Perception of academic conduct. 7. Character traits. 8. Honor code.	HP 3	Pearson Correlation
5. Is there a difference in students'	9. Academic conduct. 10. Religion.	HP 4	Pearson Chi-square; Cross-

RESEARCH QUESTIONS	VARIABLES	HYPOTHESIS	DATA ANALYSIS
academic conduct based on their parents' background and religion?	11. Parents' background.		tabulations
6. Is there a relationship between self-esteem and students' academic conduct?	12. Self-esteem. 13. Academic conduct.	HP 5	Descriptive Statistics; Means; Standard Deviations; ANOVA
SUPPLEMENTARY QUESTIONS			
1. In relation to honor code, is there a difference in students' academic conduct between those who attend AACSB accredited schools compared with students who attend non-AACSB schools?	14. AACSB/Non-AACSB 15. Honor Code.		Means; Standard Deviations; T-tests for Equality of Means
2. Is there a difference in academic conduct between male and female business students?	16. Academic conduct. 17. Gender.		Cross-tabulations; Pearson Chi-square
3. Is there a difference in academic conduct between younger students (under 32 years)	18. Age. 19. Academic conduct.		Cross-tabulations; Pearson Chi-square

RESEARCH QUESTIONS	VARIABLES	HYPOTHESIS	DATA ANALYSIS
and older students (32 years and older)?			

After administering the survey, survey items on each questionnaire were coded based on the coding structure in Appendix I. Questionnaires were received from 1,017 participants (disqualifying 12 completed by Masters' students). Data was subsequently entered in SPSS Version 14. The organization of data is important to the analysis process (Fink, 2006).

Initially, questionnaires were then batched by institutions with each completed questionnaire given a unique number (i.e., Student 1, Student 2, Student 3, and so on). Thereafter each questionnaire was coded, one at a time and entered into an Excel spreadsheet. The organization of the Excel spreadsheet was most intriguing and challenging. Although there were 62 questions, a total of 74 columns in Excel were utilized because each column represented a response selection. For example, in Q9 participants were asked to indicate, where applicable, each of the acts of academic dishonesty to which they may have been involved. Because there were five possible responses, the corresponding Excel columns were assigned as 9a, 9b, 9c, 9d, and 9e. It was logical to do it this way because if a participant chose all applicable actions, the response could be recorded in the respective column. The process was repeated until all 1,017 questionnaires were entered.

The issue of how to deal with positive responses to negative items on the questionnaire was a matter for consideration in this study (Creswell, 2003). Specifically, in this case reversed coding related to Questions 1, 5, 7- 8, 11- 14, 16-18, 30-31, 41-42,

50, 56, 58, 60-62. For example, positive response to a positive question using Likert scale would be: Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1.

Conversely, a positive response to a negative question would be re-coded as, Strongly Agree = 1, Agree = 2, Disagree = 3, and Strongly Disagree = 4. For example, item 56 is a negative question which states, “All in all, I am inclined to feel that I am a failure.” The coding would be re-coded as : Strongly disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4.

. For missing items, there were two alternatives, one being, to leave unanswered completely blank, or two, to use a dummy code, that is, a numeric code (Nardi, 2006). In either case blank space or dummy code would not be included in calculations. In this study the researcher used code 66 to represent missing data. The calculations were devoid of these codes.

At the end of the processes described above, questionnaires were audited by comparing these to the items inputted into the spreadsheet. The purpose was to assure data quality. The Excel file was subsequently uploaded into SPSS. Thereafter, the various tests were calculated among variables noted in the study. The research questions together with the hypotheses were evaluated to determine the outcome of each test.

In education research, much interest is generated in the analysis of relationships, especially in terms of comparing one variable with another (Judd & McClelland, 1989; Wiersma, 2000). In this study, the strength of the relationship between self-esteem and the frequency of academic misconduct was assessed. This was achieved by using the Pearson correlation coefficient (Larson & Farber, 2003; Morgan et al., 2004; Sprinthall, 2009). Likewise, to determine differences in academic conduct between male and female

students, the researcher used cross tabulations and Pearson chi-square tests to make the assessment. Similarly, to assess the difference between AACSB and non-AACSB students and the propensity to cheat, the researcher used the independent *t*-tests, means, and standard deviations. The cross-match data analysis table (Appendix A) summarizes how each Research Question was analyzed.

Finally, the critical alpha level for this study was established as $p = 0.01$ representing the error the researcher is willing to accept. In the test for significance, when the computed probabilities are equal to, or less than the study's critical alpha level of 0.01, statistical significance is achieved. In this instance, the null hypothesis is rejected. When the computed probability is greater than the one established the statistic is not significant, therefore, the null hypothesis is accepted (Morgan, et al., 2004; Walonick, 2003). Wiersma (2000) posits "in analyzing data by means of inferential statistics, we can use one or both of two general procedures: *testing hypotheses* or *estimating parameters*" (p. 345). The findings are presented in Chapter 4.

Statement of Hypotheses

Merriam-Webster's Collegiate Dictionary (2003) defines a hypothesis as an interpretation of a condition that forms the basis of an argument. This research contains five hypotheses each leading to one or more assumption on academic dishonesty. Students' academic misconduct is an interesting yet debatable area of research, particularly when there is no acceptable way of measuring it accurately. In relation to this study, it was hypothesized that:

1. There is no relationship between ethics instruction and the prevalence of academic dishonesty among undergraduate business students.

2. There is no relationship between students' awareness of academic conduct and the prevalence of academic dishonesty.
3. There are no relationships between students' perception of academic conduct, character traits, and honor code.
4. Students' academic conduct is not influenced by their parents' background and religion.
5. There is no relationship between self-esteem and students' academic conduct.

Human Subjects' Approval

The researcher completed human subjects' documentations and filed these with the Institutional Review Board of Colorado State University. Clayton State University required the researcher to complete online coursework in Human Ethics training with the National Institute of Health (NIH). Upon successful completion of the course, a system's generated certificate was awarded to the researcher who subsequently obtained human subjects approval from Clayton State University. In relation to a Canadian university (subsequently did not participate in the survey) modifications were done to the Consent Letter as the basis for obtaining approval from the university's Ethics Office (of this Canadian university). All remaining universities and colleges gave their assent and used the initial Human Subjects' approval from Colorado State University.

CHAPTER 4 – FINDINGS

The purposes of this study were to investigate:

- The relationship between instruction in ethics and student conduct in an academic environment.
- The overarching reasons why some students engage in academic misconduct.
- The extent to which students' conduct might be influenced when they take a course in ethics instruction.

This chapter reports the findings of data collected from surveys administered to undergraduate business students from nine universities. The findings are presented in relevant tables and are accompanied by explanations of the variables in the context of research questions together with the applicable hypotheses. The applicable percentages are based on valid data, and therefore, in some instances there are discrepancies between percentages reported in the tables and those in those reported in the discussions. The reason is that missing values are not considered.

In this study, the critical alpha level is 0.01. Statistical significance occurs when the computed probabilities are less than the study's critical *p*-value of 0.01. (Morgan, et al., 2007; Sprinthall, 2009; Walonick, 2003). The *p*-values shown in the appropriate tables were derived from computations using SPSS.

Study Participants

This study includes undergraduate business major students attending nine universities from both within the United States (Georgia locations) and the Caribbean. A

total of 1,017 students from Kennesaw State University (GA), Clayton State University (GA), Mercer University (GA), Emory University (GA), DeVry University (GA), University of the West Indies (Jamaica), University of Technology (Jamaica), University College of Mico (Jamaica), and University College of the Cayman Islands (Grand Cayman) participated in the study. Research designates (voluntary site coordinators) in all locations handed out 1,029 questionnaires (12 were disqualified because either they were not properly completed or the respondents indicated they were post baccalaureate students). The questionnaires were grouped into AACSB and non-AACSB institutions.

Table 4.1 contains the number of participants listed by school accreditation, gender, age range, and regional profile. The table indicated that 18.6% were from AACSB ($n = 189$) and 81.4% from non-AACSB ($n = 828$) schools. An overwhelming number of participants were from non-AACSB schools. The majority of non-AACSB participants were from the Caribbean ($n = 599$), while participants from U.S. non-AACSB (Georgia based) schools totaled 229. Students from two Caribbean countries (Jamaica and Grand Cayman) make up 59% of participants while U.S. students account for 41%. None of the schools in the Caribbean are accredited by the AACSB.

Table 4.1

Participants' Profile by Gender, Age, Program Accreditation, Region, Frequencies, and Percentages

Participants/Detail	N	%
Gender		
Male	377	37.1
Female	627	61.7
Missing	13	1.3
Sub-total	1,017	100.0
Age Profile (in years)		
18 – 22	537	52.8
23 – 27	190	18.7
28 – 32	96	9.4
Over 32	181	17.8
Sub-total	1,004	98.7
Accreditation Profile		
AACSB	189	18.6
Non-AACSB	828	81.4
Sub-total	1,017	100.0
Regional Profile		
USA	418	41.1
Caribbean	599	58.9
Sub-total	1,017	100.0

In terms of academic standing, classifications included freshman (1st year), sophomore (2nd year), junior (3rd year), and senior (4th year). Students outside of the United States were denoted as 1st year through 4th year, and their programs were identical to those in the United States. Grade Point Average (GPA) for Caribbean universities was computed as those in the United States. Because the overall study was directed to undergraduate business major students, program major was reported as business or non-business.

Demographics

The data collected from each of the participants included information about themselves as well as their parents. Information about parents included age, occupation, and their educational attainment. Parents' age was reported by students as over, under 50, or deceased. These data are consolidated in Table 4.2.

Table 4.2

Parents' Demographic Information Based on Age, Education, Frequencies, and Percentages

Demographic	Mother		Father	
	Frequency	%	Frequency	%
AGE				
<50	460	45.2	306	30.1
>50	464	45.6	519	51.0
Deceased	60	5.9	131	12.9
Sub-total	984	96.8	956	94.0
Missing	33	3.2	61	6.0
Total	1,017	100.0	1,017	100.0
EDUCATION				
≤High School	517	50.8	547	53.8
Some college	226	22.2	154	15.1
Bachelor's	149	14.7	136	13.4
Master's	64	6.3	67	6.6
Doctorate	11	1.1	23	2.3
Sub-total	967	95.1	927	91.2
Missing	50	4.9	90	8.8
Total	1,017	100.0	1,017	100.0

The number of students with mothers in the age category of over 50 approximated to 47% ($n = 464$). Students with mothers over the age of 50 years was approximately the same ($n = 460$).

Mothers' education was from high school diploma or less to the attainment of the doctorate. An examination of education showed approximately 53% of the students'

mothers achieved high school diploma or less with an additional 23% gaining some college education. Approximately 15% completed their bachelor's degree. About 46.5% of mothers were reported to have attained the level of high education between some college and the attainment of doctoral education.

In terms of the fathers, approximately 32% of fathers were found to be less than 50 years old ($n = 306$). In contrast, slightly more than 54% of the fathers were reported as being over 50 years ($n = 519$). The table also shows that 59% ($n = 547$) of fathers were reported to have attained a high school diploma or less. About 17% ($n = 154$) obtained some college education, while 15% ($n = 136$) of fathers were reported to have completed a bachelor's degree.

Results were analyzed to determine the extent to which scales' met the reliability test using Cronbach's alpha. As a measure of consistency alpha should be above 0.70 (Morgan, Leech, Gloeckner & Barrett, 2007, p. 129). With the exception of one scale (honor code) which was comprised of two items, Cronbach's alphas ranged from 0.52 to 0.87 as shown by Table 4.3. The Cronbach's alphas indicate that the reliability test was met for this study though honor code was less than 0.20. Therefore, the alphas of 0.52 to 0.87 suggest the items included in the scales are "internally consistent" (Huck, 2004, p. 81. Internal consistency measure of honor code was 0.19, and it indicated a relatively weak measure of internal consistency and any reference to it should be interpreted cautiously.

Table 4.3

Reliability Statistics based on Cronbach's Alpha by Scale

Scale	No. of Items	Cronbach's Alpha
Awareness of Academic Conduct	6	.52
Perception of Academic Conduct	3	.58
Character Traits	7	.78
Honor Code	2	.19
Religion	2	.87
Self-esteem	16	.77

Research Question 1

Is there a difference in the prevalence of academic dishonesty between students who have had ethic instruction and those who have not had it?

The influence of ethics instruction was based on students' response to items related to academic dishonesty in college and the number of times students engaged in academic dishonesty. That is, ethics instruction was compared to the variable prevalence of academic dishonesty. Table 4.4 shows a summary of the responses to ethics instruction in relation to academic dishonesty (Item 23) and the number of times (prevalence) dishonesty was reported to have occurred (Item 24).

Table 4.4

Students' Responses to Admission to Academic Dishonesty, Frequency of Academic Dishonesty, and Percentages

Students' response	Valid		Cases Missing		Total	
	N	%	N	%	N	%
Admission to Academic Dishonesty (Q23)	993	97.6	24	2.4	1,017	100.0
Frequency of Academic Dishonesty (Q24)	994	97.7	23	2.3	1,017	100.0

Of the 1,017 students participating, 98% ($n = 993$) provided responses indicating whether they had ever been academically dishonest (Item 23). Similarly, 98% ($n = 994$) provided feedback in terms of the number of times they were academically dishonest in college. Non-response (missing item) accounted for about 2% (Item 23 and 24).

Table 4.5 shows that overall, about 50% ($n = 499$) of the participants indicated they completed an ethics course and a similar number of participants (50%, $n = 494$) stated that they did not complete an ethics course. Among the students completing an ethics course, about 59% ($n = 293$) stated they did not engage in academic dishonesty. However, the other 41% ($n = 206$) reported they did. In terms of the number of students not completing ethics instruction (50%, $n = 494$), of this group, about 61% ($n = 302$) reported that they had not been academically dishonest. The other 39% ($n = 192$) who did not complete an ethics class indicated that they had been academically dishonest. Although it is unclear if the course was completed before or after the incidence of academic dishonesty, the pattern suggests that taking an ethics class is not correlated with academic honesty.

Table 4.5

Cross Tabulation of Students' Responses to Completion of Ethics Instruction, and Admission to Academic Dishonesty (Frequencies)

Students' response	Academic Dishonesty		
	Yes	No	Total
Did complete Ethics Instruction	206	293	499
Did not complete Ethics Instruction	192	302	494
Total	398	595	993

Chi-square tests in Table 4.6 show no statistical difference between ($\chi^2 = 0.603$, $p = 0.437$) between students taking an ethics course and those not taking ethics course and their academic dishonesty. Therefore, academic dishonesty was not influenced by the completion of a course of instruction in ethics.

Table 4.6

Counts, Expected Counts, Completion of Ethics Instruction, Degree of Dishonesty, and Chi-Square Analysis

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.603 ^a	1	.437		
Continuity Correction ^b	.507	1	.476		
Likelihood Ratio	.604	1	.437		
Fisher's Exact Test				.476	.238
Linear-by-Linear Association	.603	1	.438		
N of Valid Cases	993				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 198.00.

^b Computed only for a 2x2 table

Ethics Instruction and Frequency of Academic Dishonesty

Table 4.7 represents a cross tabulation of the frequencies of ethics instruction and academic dishonesty in college. This is the response tabulated from item 24 of the questionnaire, which asked students to indicate the number of times they had been academically dishonest in college. Approximately 50% ($n = 500$) of the respondents indicated that they did complete an ethics course while 50% ($n = 494$) did not complete a course in ethics instruction. Of those who completed ethics instruction, 58% ($n = 290$) reported that they did not engage in academic dishonesty. Approximately 27% ($n = 134$)

stated that they were culpable 1–2 times in contrast to 6% ($n = 30$) and 9% ($n = 46$) who engaged in academic dishonesty 3–4 times, and more than 4 times, respectively.

Table 4.7

Cross Tabulation of Students' Responses to Completion of Ethics Instruction Course, Prevalence of Academic Dishonesty, and Frequencies

	None	1-2 times	3-4 times	4+ times	
Students' response					Total
Did complete Ethics Instruction	290	134	30	46	500
Did not complete Ethics Instruction	302	120	38	34	494
Total	592	254	68	80	994

Of the students who reported that they did not take ethics instruction ($n = 494$), 61% ($n = 302$) indicated that at *no time* did they engage in academic dishonesty. Further examination shows that approximately 24% ($n = 120$) of the students reported their engagement in academic dishonesty of 1–2 times in contrast to 8% ($n = 38$) and 7% ($n = 34$) who stated that involvement in academic dishonesty occurred 3-4 times and more than 4 times, respectively.

The Chi-square tests results are presented in Table 4.8 and were used to evaluate the relationship between the prevalence of academic dishonesty (i.e., none, 1-2 times, 3-4 times and 4+ times), and students' responses to completion of ethics instruction. The chi-square statistic was not significant at the critical alpha level ($\chi^2 = 3.720$, $p = 0.293$). It can be concluded there is no significant relationship between prevalence of academic dishonesty and completion of ethics instruction. Hence the null hypothesis should be accepted.

Table 4.8

Counts, Expected Counts, Chi-Square Analysis on Completion of Ethics Instruction Course and Prevalence of Academic Dishonesty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.720 ^a	3	.293
Likelihood Ratio	3.729	3	.292
Linear-by-Linear Association	1.076	1	.300
N of Valid Cases	994		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 33.79.

Research Question 2

What is the association between students' awareness of academic conduct and the prevalence of academic dishonesty?

The purpose of this question was to ascertain participants' perspective on how they view other students who may have engaged in academic dishonesty. This analysis is based on a conduct scale of a low score (1) means *other students are dishonest* while a high score (4) means *other students are honest*. Table 4.9 provides the descriptive output. The values in the tables are based on cases with no missing data for variables in the analysis.

Table 4.9

Awareness of Academic Conduct, Number of Participants, Means, Standard Deviations, Error Rate, and Confidence Interval

Dishonesty in College	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Aware	400	2.67	.44	.022	2.63	2.71
Not Aware	602	3.02	.45	.018	2.98	3.05
Total	1,002	2.88	.48	.015	2.85	2.91

This table comprises the responses obtained from item 23 which asks respondents to indicate if they had ever been academically dishonest in college. The analyses are based on 1,002 valid responses. The results showed that 40% of the students ($n = 400$) indicated a positive response to awareness of academic conduct and 60% ($n = 602$) indicated non-awareness of academic conduct. Students who indicated an awareness of academic conduct had a mean score of 2.67 in contrast to other students with a mean score of 3.02, which indicated a negative response.

For respondents who provided response in the affirmative ($n = 400$) at 95% confidence interval, the means for the lower and upper bound were 2.63 and 2.71, respectively. In contrast, a negative response based on a 95% confidence interval for the mean provided a lower bound of 2.98 and an upper bound of 3.08. With the mean of 2.63, it encompasses the band of *agree and disagree*. The students who indicated in the affirmative (i.e., yes) that they had been academically dishonest in college ($n = 400$) scored lower ($M = 2.67$, $SD = 0.44$) on awareness of academic conduct than those reporting that they have not engaged in dishonest practices ($M = 3.02$, $SD = 0.45$)

To further evaluate awareness of academic conduct and prevalence of academic dishonesty, a one-way ANOVA was run. The results are characterized in Table 4.10 shown below.

Table 4.10

ANOVA: Awareness of Academic Conduct, Mean, and Independent Tests

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29.143	1	29.143	142.521	.000
Within Groups	204.480	1000	.204		
Total	233.623	1001			

The F-test computations contained in Table 4.10 were used to assess whether the awareness and non-awareness groups have different means on academic dishonesty. A significant F-ratio was found indicating that the awareness and non-awareness groups had different dishonesty means which was not due to chance ($F = 142.521, p < 0.01$).

Table 4.11 shows the four different responses obtained from having asked participants to indicate the number of times they engaged in academic dishonesty.

Table 4.11

Awareness of Academic Conduct: Prevalence of Dishonesty, Frequencies, Mean, Standard Deviation, Error Rate, and Confidence Interval

Students No. of Times of Dishonesty	N	M	SD	SE	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
None	598	3.03	.45	.012	2.99	3.06
1-2	254	2.75	.40	.025	2.70	2.80
3-4	70	2.57	.41	.049	2.47	2.67
>4	80	2.46	.49	.055	2.35	2.57
Total	1,002	2.88	.48	.015	2.85	2.91

The findings contained in Table 4.11 showed the number of times students had been dishonest as being *none*, which has the largest mean ($M = 3.03$) for frequency of

dishonesty and the fourth largest standard deviation ($SD = 0.45$). In contrast, students who engaged *the most* in academic misconduct (i.e., *more than 4 times*) had the lowest mean for dishonesty and the highest standard deviation ($n = 80$, $M = 2.46$, $SD = 0.49$).

The confidence interval at 95% produced very little difference between the levels of responses provided by students as depicted by the lower and the upper bounds.

Similarly, the results show that the means for dishonesty appear to be decreasing as the number of times that participants indicate a higher level of academic dishonesty. In other words, the means become less as participants reported more incidence of academic dishonesty.

Research Question 3

What are the reasons for academic dishonesty among business students?

This question attempted to determine the most prevalent reasons students would risk their education and their future by engaging in academic misconduct. If they are caught, the consequences are severe. The results are presented in Table 4.12.

Table 4.12

Reasons for Academic Dishonesty: Frequencies and Percentages

Reasons for Academic Dishonesty	Frequency	%
Higher Grade	168	16.5
Avoid Failing	262	25.8
Retain Award	16	1.6
Keep Up	9	.9
Never	516	50.7
<i>Sub- total</i>	<i>971</i>	<i>95.5</i>
Missing	46	4.5
Total	1,017	100.0

Table 4.12 shows that 53% ($n = 516$) of the students surveyed reported they did not engage in any form of academic dishonesty. Approximately 27% ($n = 262$) of

participants stated the strongest reason that contributed to their engagement in academic dishonesty was to *avoid failing the course*. Similarly, 17.3% ($n = 168$) indicated their reason was *to get a higher grade*. Less than 2% of students ($n = 16$) stated their reason for engaging in academic dishonesty was *to retain their financial award*. Less than 1% ($n = 9$) attributed their dishonesty to *keeping up with other students* who cheat.

In the context of the reasons identified by the students in the preceding paragraph, academic dishonesty cannot simply be regarded as an event occurring by chance. The reasons that students provide are clear and demonstrate that their intentions are deliberate.

Research Question 4

What is the relationship between students' perception of academic conduct, character traits, and honor code?

In this section the statistics for each pair of variables are based on all the cases with valid data for that pair. The correlation pairs of variables are perception academic conduct with character traits and with honor code. These results are in Table 4.13.

Table 4.13

Correlations: Perception of Academic Conduct based on Character Traits and Honor Code

	Character Traits	Honor Code
Pearson Correlation	.605	.378
Sig. (2-tailed)	.000	.000
<i>N</i>	1014	1007

The correlation between the variables, *character traits* and students' perception of academic conduct, and *honor code* and students' perception of academic conduct are

evaluated. The table indicates that the correlations of the two variables character traits and honor code are 0.605 and 0.378, respectively. The two variables of character traits and honor code do show some influence on academic dishonesty.

. The Pearson r -value of 0.605 for character traits is moderately high which is significant at $p = 0.000$ and suggests character traits play a role in academic dishonesty. Although the Pearson r -value for honor code is 0.378, not a relatively high value, yet it is significant at $p < .01$. Sprinthall (2009) explains that because of significance, “consistent and reliable results can be obtained” (p. 46). However, non-reliable measures must be interpreted cautiously. The correlations consistently show they are statistically significant in that $p < 0.001$ (Leach, Barrett, & Morgan, 2005, pp. 72 – 74).

Research Question 5

Is there a difference in students’ academic conduct based on their parents’ background and religion?

To gain a better understanding of this research question, parents’ background were evaluated in terms of mothers’ and fathers’ age with students cheating, plagiarism, copy and paste actions, parents’ education, parents’ occupation/careers, and parents’ support. The statistics described in this section are based on valid responses from participants. Non-responses are not included in the calculations. To answer this research question several cross-tabulations were used, and included item 9a–9f, items 34–35. These were cross-tabulated with items 25–28. In item 9, participants were asked to identify the specific academic dishonesty that they had engaged in.

Impact of Mothers' Age: Students' Cheating

For item 9a, participants were asked to indicate whether or not they cheated on tests in the last two years. These responses were cross-tabulated with responses to item 25M, the results of which are contained in Table 4.14.

Table 4.14

Cross Tabulation of Students' Responses to Cheating on Tests by Mothers' and Fathers' Ages and Frequencies

	Mothers' Age				Father's Age			
	<50	>50	No longer living	Total	<50	>50	No longer alive	Total
No Cheating on Tests	372	385	51	808	250	427	109	786
Cheating on Tests	63	48	3	114	38	63	9	110
Total	435	433	54	922	288	490	118	896

Approximately 88% ($n = 808$) of the students both with mothers under and over 50 stated that they did not cheat on tests. The remaining 12% ($n = 114$) (with mothers under and over 50) confirmed that they did cheat on tests. Of this group, about 55% of the students ($n = 63$) with younger mothers (< 50 years) admitted that within the last two years during college they did cheat on tests while 42% ($n = 48$) with older mothers stated they cheated. The remaining 3% ($n = 3$), who reported their mothers as deceased, indicated they did cheat on tests.

The chi-square statistic as presented in Table 4.15 was performed to determine the relationship between the variables mothers' age and students' cheating. There was no statistical difference found between mothers' age and the level of cheating among students ($\chi^2 = 4.766$, $p = 0.092$). Therefore, the null hypothesis should be accepted.

Table 4.15

Counts, Expected Counts, based on Mothers' and Fathers' Age, and Cheating using Chi-Square Analysis

	Mother			Father		
	Value	Df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.766 ^a	2	.092	2.747 ^b	2	.253
Likelihood Ratio	5.226	2	.073	3.063	2	.216
Linear-by-Linear Association	4.621	1	.032	1.640	1	.200
N of Valid Cases	922			896		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.68.

^b 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.49.

Impact of Fathers' Age: Students' Cheating

Table 4.14 provides information on the cross-tabulation of fathers' age and students' response to cheating with the relative frequencies. Overall, the total number of students who reported their fathers' age under 50 was 32% ($n = 288$) while 55% ($n = 490$) stated their fathers' age as over 50, and the remaining 13% ($n = 118$) were deceased. Approximately 88% ($n = 786$) of the students (both with father under and over 50) stated that they did not cheat on tests. The remaining 12% ($n = 110$) with fathers under and over 50 confirmed that they did cheat on tests. Of this group, about 35% of the students ($n = 38$) with younger fathers (< 50 years) admitted that within the last two years of college they did cheat on tests while 57% ($n = 63$) with older fathers stated they cheated. The remaining 8% ($n = 9$) who indicated they did cheat on tests reported their fathers as deceased.

A chi-square statistic with alpha at .01 and 2 degrees of freedom was used to compare the relationship between the variables, fathers' age and students' cheating (See

Table 4.15). There was no relationship between the variables, fathers' age and the level of cheating among students ($\chi^2 = 2.747, p = 0.253$). The null hypothesis should be accepted. Because more students had older fathers, it gave the appearance there were more cheating taking place among these students.

Comparing Parents' Education with Students' Cheating

To further answer the research question, both mothers' and fathers' education were cross-tabulated with the students' response to cheating. These results are in Table 4.16.

Table 4.16

Cross Tabulation of Students' Responses to Cheating on Tests, Mothers' and Fathers' Education Levels, and Frequencies

Students' response	Mother's Education					Father's Education						
	≤ High School	Some College	BA/BS	MA/MS	PhD	Total	≤ High School	Some College	BA/BS	MA/MS	PhD	Total
No Cheating on Tests	432	185	122	48	9	796	455	128	109	53	19	764
Cheating on Tests	52	27	18	15	1	113	55	16	19	13	3	106
Total	484	212	140	63	10	909	510	144	128	66	22	870

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The total number of students who reported their mothers' education attaining high school diplomas or less was 53% ($n = 484$), with some college education as 23% ($n = 212$), with bachelor's degrees as 15% ($n = 140$), with master's degrees as 7% ($n = 63$), and with doctorates as 2% ($n = 10$). Approximately 88% ($n = 796$) of students with mothers' education ranging from high school diplomas and less to doctorates stated they did not cheat on tests. The remaining 12% ($n = 113$) reported they did cheat on tests. Of those who admitted to cheating on tests, about 46% ($n = 52$) had mothers with high school diploma and less, 24% ($n = 27$) with some college, 16% ($n = 18$) with bachelor's degrees, 13% ($n = 15$) with master's degrees, and the remaining 1% ($n = 1$) with doctorates

Chi-square tests contained in Table 4.17 were used to evaluate the relationships between mothers' education and the students' responses to cheating on tests. The relationships were not statistically significant ($\chi^2 = 8.854$, $p = 0.065$).

Table 4.17

Count, Expected Counts, Referencing Mothers' and Fathers' Education Level, and Students' Cheating on Tests Using Chi-Square Analysis

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.854 ^a	4	.065	5.460 ^b	4	.243
Likelihood Ratio	7.552	4	.109	4.975	4	.290
Linear-by-Linear Association	4.953	1	.026	4.036	1	.045
N of Valid Cases	909			870		

^a 1 cell (10.0%) have expected count less than 5. The minimum expected count is 1.24.

^b 1 cell (10.0%) have expected count less than 5. The minimum expected count is 2.68.

To determine the relationship between fathers' education and students' cheating on tests, a cross-tabulation was developed with results shown in Table 4.16. The total number of students who reported their fathers' education as high school diplomas or less was 59% ($n = 510$), some college education as 16% ($n = 144$), bachelor's degrees as 15% ($n = 128$), master's degrees as 8% ($n = 66$), and doctorates as 2% ($n = 22$). Approximately 88% ($n = 764$) of students with fathers' education ranging from high school diplomas and less to doctorates stated they did not cheat on tests. The remaining 12% ($n = 106$) reported they did cheat on tests. Of this group who admitted to cheating on tests, about 52% ($n = 55$) had fathers with high school diploma and less, 15% ($n = 16$) some college, 18% ($n = 19$) bachelor's degrees, 12% ($n = 13$) master's degrees, and the remaining 3% ($n = 3$) with doctorates.

Table 4.17 provides the results of the chi-square tests used to evaluate the relationships between fathers' education and students' response to cheating on tests. With 4 degrees of freedom there was no statistical relationships found between fathers' education and students' cheating on tests ($\chi^2 = 5.460$, $p = 0.243$). Therefore, the null hypothesis can be accepted.

Association between Parents' Occupation with Students' Cheating

To further answer this research question a cross-tabulation was done to explore parents' career and occupation on students' cheating in tests. Table 4.18 provides the relevant statistics for fathers and mothers.

Table 4.18

Cross Tabulation of Students' Responses to Cheating on Tests by Fathers' and Mothers' Occupations (Frequencies)

Students' response	Unemployed/ Retired	Mgmt./ Bus./Fin.	Fathers' Occupation				Farming/ Fishing/Forestry	Construction	Total
			Professional	Service	Sales				
No Cheating on Tests	29	192	113	174	46		64	118	736
Cheating on Tests	3	39	13	19	8		9	13	104
Total	32	231	126	193	54		73	131	840
Mothers' Occupation									
No Cheating on Tests	87	215	122	223	79		29	8	763
Cheating on Tests	13	38	25	18	9		6	1	110
Total	100	253	147	241	88		35	9	873

The various categories of fathers' careers/occupations (item 27) were assessed.

Table 4.18 shows that the students who reported fathers' careers/occupation as unemployed/retired was about 4% ($n = 32$), in management/ finance/business as 27% ($n = 231$), professional careers as 15% ($n = 126$), service specialists as 23% ($n = 193$), sales as 6% ($n = 54$), farming/fishing/forestry as 9% ($n = 73$), and in construction as 16% ($n = 131$).

Approximately 88% ($n = 736$) of students reported that they did not cheat on tests. The remaining 12% ($n = 104$) indicated they did cheat on tests. In this category (i.e., those cheating on tests) about 3% ($n = 3$) had fathers as unemployed/retired, 37% ($n = 39$) in management/finance/business, 12% ($n = 13$) in professional careers, 18% ($n = 19$) in services, 8% ($n = 8$) in sales, 9% ($n = 9$) in farming/fishing/forestry, and the remaining 13% ($n = 13$) in construction. The largest group of students admitting cheating on tests had mothers and fathers with careers/occupation in management/finance/business.

The Chi-square tests are presented in Table 4.19 and were used to evaluate the relationships between fathers' careers/occupations and students' responses to cheating on tests. The chi-square statistic was not significant at the critical alpha level ($\chi^2 = 7.246$, $p = 0.299$). It can be concluded there is no significant relationship between fathers' careers/occupations and students' cheating on tests.

Table 4.19

Counts, Expected Counts, Mothers' and Fathers' Occupations, and Extent of Cheating on Tests using Chi-Square Analysis

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.838 ^a	6	.094	7.246 ^b	6	.299
Likelihood Ratio	11.377	6	.077	7.019	6	.319
Linear-by-Linear	1.982	1	.159	1.818	1	.178
Association						
N of Valid Cases	873			840		

^a 2 cells (14.3%) have expected counts less than 5. The minimum expected count is 1.13.

^b 1 cell (7.1%) have expected count less than 5. The minimum expected count is 3.96.

The careers/occupations of mothers, as solicited in item 27 of the questionnaire, included those unemployed, management/finance/business, professional, service, sales, farming/fishing/forestry, and construction. Table 4.18 shows that the total number of students who reported mothers' careers/occupation as unemployed/retired was about 11% ($n = 100$), 29% ($n = 253$) in management/ finance/business, 17% ($n = 147$) in professional careers, 28% ($n = 241$) as service specialists, 10% ($n = 88$) in sales, 4% ($n = 35$) in farming/fishing/forestry, and 1% ($n = 9$) in construction.

Approximately 87% ($n = 763$) of students reported that they did not cheat on tests. The remaining 13% ($n = 110$) reported they did cheat on tests. Of this group, (i.e., those cheating on tests) about 12% ($n = 13$) had mothers as unemployed/retired, 35% ($n = 38$) in management/finance/business, 23% ($n = 25$) in professional careers, 16% ($n = 18$) in services, 8% ($n = 9$) in sales, 5% ($n = 6$) in farming/fishing/forestry, and the remaining 1% ($n = 1$) in construction. The largest group of students admitting cheating on tests had parents with careers/occupation in management/finance/business.

In Table 4.19 a chi-square test was performed to assess if there was a significant relationship between fathers' careers/occupations and students' responses to cheating on tests. The chi-square statistic was not significant at the critical alpha level ($\chi^2 = 10.838, p = 0.094$). It can be concluded there is no significant relationship between fathers' careers/occupations and cheating on tests. Therefore, the null hypothesis should be accepted.

Ascertaining Parents' Support with Students' Cheating

This section evaluates the influence of cheating based on the type of support given by parents (e.g., one or both parents, parents seeking outside help from other students, parents paying for extra lessons). To better explain this phenomenon a cross-tabulation was done between cheating on tests and parents' support. (Table 4.20)

Table 4.20

Cross Tabulation, Students' Responses to Cheating on Tests, Extent of Parents' Support, and Frequencies

Students' response	Parents' Support					Total
	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents Paid for Extra lessons	Neither Academic Help nor Financial Support Provided by Parents	Students Reported Being Independent of Parents	
No Cheating on Tests	219	37	241	42	263	802
Cheating on Tests	42	8	32	9	22	113
Total	261	45	273	51	285	915

For item 28, respondents were asked to indicate the type of support received from parents. Similarly, for item 9(a) they were asked to state whether or not they did cheat on tests. A cross-tabulation was done to record the results derived from the two variables (i.e., cheating on tests, parents' support) and are contained in Table 4.20.

The total number of students who reported support from one or both parents was 28% ($n = 261$), 5% ($n = 45$) attributed to who seek outside support for students, 30% ($n = 273$) credited with paying extra lesson fees, 6% ($n = 51$) provided either academic or financial support, or 31% ($n = 285$) reported being independent of their parents. About 88% ($n = 802$) of students who received support ranging from one or both parents to none due to their independence reported they did not cheat on tests. The remaining 12% ($n = 113$) reported they did cheat on tests. Of this group who admitted to cheating on tests, about 37% ($n = 42$) received support from one or both parents, 7% ($n = 8$) had parents who obtained outside help, 28% ($n = 32$) of parents paid for extra lessons, 8% ($n = 9$) had parents who gave no form of support and 20% ($n = 22$) who reported as being independent of their parents. The pattern is that even though strong support was received from parents (i.e., one or both parents assisted, outside help from other students, and parents paid for extra lessons) approximately 72% ($n = 82$) of the respondents who admitted previously to cheating on tests, the ratio of those who did not get the support was slightly over 2.6 times ($n = 82$ and $n = 31$). In other words, there was considerable level of cheating (72%, $n = 82$) vis-à-vis the support received compared with students who received no support or were independent of their parents.

The chi-square tests are presented in Table 4.21 and were used to evaluate the relationships between parents' support (i.e., one or both parents assisted, parents' seek

outside help from other students, parents paid for extra lessons, parents provided no academic help or financial support, students independent of their parents) and students' response to cheating on tests. The relationships were not statistically significant at the critical alpha level ($\chi^2 = 11.668, p = 0.020$).

Table 4.21

Counts, Expected Counts, Students' Responses to Cheating on Tests, Extent of Parents' Support, Chi-Square Analysis

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.668 ^a	4	.020
Likelihood Ratio	11.912	4	.018
Linear-by-Linear Association	8.453	1	.004
N of Valid Cases	915		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.56.

Influence of Parents' Age on Students' Plagiarizing Others Work

For this section, mothers' age was cross-tabulated with the response in terms of whether students plagiarized the work of others. In item 9(b) participants were asked to indicate whether or not they had ever plagiarized. In addition, for item 25 they were asked to state their mothers' age. The cross-tabulated results are presented in Table 4.22.

Students who reported their mothers' age under 50 was 47% ($n = 435$) while 47% ($n = 433$) stated their mother' as over 50, and the remaining 6% ($n = 54$) was deceased. Approximately 88% ($n = 811$) of the students (with mothers under and over 50) stated that they did not plagiarize. The remaining 12% ($n = 111$) with mothers under and over 50 stated that they did plagiarize other peoples' work. Of this group, about 65% of the students ($n = 72$) who admitted that within the last two years they did plagiarize other peoples' work had younger mothers (< 50) while 33% ($n = 37$) with older mothers stated

they plagiarized. The 2% ($n = 2$) who reported their mother was deceased indicated they did plagiarize other peoples' work.

Table 4.22

Cross Tabulation of Students' Responses to Plagiarizing Work of Others by Mothers' and Fathers' Age and Frequencies

Students' Response	Mothers' Age				Fathers' Age			
	<50	>50	No longer alive	Total	<50	>50	No longer alive	Total
Did not plagiarize work of others	363	396	52	811	244	432	112	788
Plagiarized work of others	72	37	2	111	44	58	6	108
Total	435	433	54	922	288	490	118	896

The chi-square test was performed, results presented in Table 4.23, to assess whether there was a significant relationship between the variables mothers' age (i.e., <50, >50, and deceased) and students' responses to plagiarizing others' work. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 16.900$, $p < 0.01$). It can be concluded there is a significant relationship between mothers' age (<50, >50, and deceased mothers) and students' plagiarizing others' work. Therefore, the null hypothesis should be rejected.

Table 4.23

Count, Expected Count, Students' Responses to Plagiarizing Work of Others by Mothers' and Fathers' Age using Test Statistic based on Chi-Square Analysis

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.900 ^a	2	.000	8.252 ^b	2	.016
Likelihood Ratio	17.789	2	.000	9.379	2	.009
Linear-by-Linear Association	16.567	1	.000	7.729	1	.005
N of Valid Cases	922			896		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.50.

^b 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.22.

Table 4.22 contains the summary of the cross-tabulated results of students' responses to whether or not they plagiarized other peoples' work, with reporting on their fathers' age. The total number of students who reported their fathers' age under 50 was 32% ($n = 288$) while 55% ($n = 490$) stated their father's age as over 50, and the remaining 5% ($n = 118$) was deceased. Approximately 88% ($n = 788$) of the students (with fathers under and over 50) stated that they did not plagiarize others' work. The remaining 12% ($n = 108$) had fathers under and over 50 confirmed that they did plagiarize. Of this group, about 41% of the students ($n = 44$) had younger fathers (< 50 years) admitted that within the last two years they did plagiarize while 54% ($n = 58$) had older fathers stated they plagiarized. The remaining 5% ($n = 6$) who reported their father as deceased indicated they did plagiarize.

The chi-square test was performed, results presented in Table 4.23, to determine if there was a significant relationship between fathers' age (i.e., <50, >50, deceased) and students' plagiarizing others' work. The chi-square statistic was not significant at the

critical alpha level ($\chi^2 = 8.252, p = 0.016$). It can be concluded there is no significant relationship between fathers' age (i.e., <50, >50, deceased) and students' plagiarizing others' work. Therefore, the null hypothesis should be accepted.

Extent of Students' Plagiarism Based on Mothers' Level of Education

For this section, students' responses to whether or not they plagiarized were cross-tabulated with mothers' education level. The results are contained in Table 4.24. The analysis is based on 909 valid responses.

Table 4.24 contains frequencies of students' responses to whether or not they plagiarize and mothers' education. Overall, the distribution of students who reported their mothers' education as high school diplomas or less was 52% ($n = 484$), some college education as 23% ($n = 212$), bachelor's degrees as 15% ($n = 140$), with master's degrees as 7% ($n = 63$), and doctorates as 1% ($n = 1$). Approximately 88% ($n = 800$) of students stated they did not plagiarize. The remaining 12% ($n = 109$) reported they did plagiarize other peoples' work. Of this group who admitted to plagiarizing, about 67% ($n = 73$) had mothers with high school diploma and less, 13% ($n = 14$) with some college, 12% ($n = 13$) with bachelor's degrees, 7% ($n = 8$) with master's degrees, and the remaining 1% ($n = 1$) with doctorates. The pattern is that with higher levels of mothers' education, plagiarizing among students appear to decrease.

Table 4.24

Cross Tabulation of Students' Responses to Plagiarizing Work of Others by Mothers' and Fathers' Education and Frequencies

Students' response	Mother's Education					Father's Education						
	≤ High School	Some College	BA/BS	MA/MS	PhD	Total	≤ High School	Some College	BA/BS	MA/MS	PhD	Total
Did not plagiarize	411	198	127	55	9	800	438	132	117	59	19	765
Did plagiarize	73	14	13	8	1	109	72	12	11	7	3	105
Total	484	212	140	63	10	909	510	144	128	66	22	870

A chi-square test was performed to assess if there was a significant relationship between mothers' education (i.e., <high school, some college, BA/BS, MA/MS, and PhD) and students' responses to plagiarizing. The results are presented in Table 4.25. The chi-square statistic was not significant at the critical alpha level ($\chi^2 = 11.252$, $p = 0.024$). It can be concluded there is no significant relationship between mothers' education (<high school, some college, BA/BS, MA/MS, and PhD) and students' plagiarism. The null hypothesis can be accepted.

Table 4.25

Count, Expected Count, Students' Responses to Plagiarizing Work of Others by Mothers' and Fathers' Age using Test Statistic Based on Chi-Square Analysis

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.252 ^a	4	.024	5.551 ^b	4	.235
Likelihood Ratio	12.031	4	.017	5.807	4	.214
Linear-by-Linear Association	3.478	1	.062	2.212	1	.137
N of Valid Cases	909			870		

^a 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.20.

^b 1 cells (10.0%) have expected count less than 5. The minimum expected count is 2.66.

Extent of Plagiarism Based on Fathers' Level of Education

A cross-tabulation was done between students responses to plagiarizing and fathers' age. These results are shown in Table 4.24. The total number of students who reported their fathers' education as high school diplomas or less was 58% ($n = 510$), with some college education as 17% ($n = 144$), bachelor's degrees as 15% ($n = 128$), master's degrees as 8% ($n = 66$), and doctorates as 2% ($n = 22$). Approximately 88% ($n = 765$) of students with fathers' education ranging from high school diplomas and less to doctorates

stated they did not plagiarize. The remaining 12% ($n = 105$) reported they did plagiarize other peoples' work. Of this group who admitted to plagiarizing, about 69% ($n = 72$) had fathers with high school diploma and less, 11% ($n = 12$) with some college, 10% ($n = 11$) bachelor's degrees, 7% ($n = 7$) master's degrees, and the remaining 3% ($n = 3$) with doctorates. The pattern is that as fathers' education level is greater the percentage of students' plagiarizing appear to decrease.

Chi-square tests were performed to assess whether there was a significant relationship between fathers' education (i.e., <high school, some college, BA/BS, MA/MS, and PhD) and students' responses to plagiarizing. The results are presented in Table 4.25. The chi-square statistic was not significant at the critical level ($\chi^2 = 5.551, p = 0.235$). Similarly, a weak linear-by-linear relationship denoted by 0.137 confirms next to no relationship between the variables. On this basis it can be concluded there is no significant relationship between fathers' education (<high school, some college, BA/BS, MA/MS, and PhD) and students' plagiarism. The null hypothesis should be accepted.

Impact of Mothers' Career/Occupation on Plagiarism

An assessment was done to determine the extent to which mothers' careers/occupations affected participants' degree of plagiarism. The results are conveyed in Table 4.26, which contains responses to items 9b and 27. Respondents were asked to indicate whether they did plagiarize other peoples' work (9b) and to indicate their mothers' occupation/career (27). The careers/occupations of mothers included unemployed or retired, management/business/finance, professional, service, sales, farming/fishing/forestry, and construction.

Table 4.26

Cross Tabulation of Students' Responses to Plagiarizing Work of Others by Fathers' and Mothers' Occupations (Frequencies)

Students' Response	Unemployed/ Retired	Fathers' Occupation					Total
		Mgmt./ Bus./Fin.	Professional	Service	Sales	Farming/ Fishing/Forestry	
Did not plagiarize work of others	31	201	114	169	48	61	739
Plagiarized work of others	1	30	12	24	6	12	101
Total	32	231	126	193	54	73	840
Mothers' Occupation							
Did not plagiarize work of others	89	216	132	220	78	25	769
Plagiarized work of others	11	37	15	21	10	10	104
Total	100	253	147	241	88	35	873

The total number of students who reported mothers' careers/occupation as unemployed/retired was about 11% ($n = 100$), management/ finance/business as 29% ($n = 253$), professional careers as 17% ($n = 147$), service specialists as 28% ($n = 241$), in sales as 10% ($n = 88$), farming/fishing/forestry as 4% ($n = 35$), and in construction as 1% ($n = 9$). Approximately 88% ($n = 769$) of the students stated that they did not plagiarize other peoples' work. The remaining 12% ($n = 104$) confirmed they did plagiarize. Of this group, 11% ($n = 11$) of students who had mothers in unemployment/retired category admitted plagiarizing the work of others, 36% ($n = 37$) management/business/finance, 14% ($n = 15$) in the professional category, 21% ($n = 21$) in services, 9% ($n = 10$) in sales, and 9% ($n = 10$) in farming/fishing/forestry. The emerging pattern is that fewer students who had fathers in occupation/careers of farming/fishing/forestry and construction compared to white collar occupation/careers (i.e., management/business/finance, professional, service, and sales) engaged in plagiarizing others' work.

The chi-square tests are presented in Table 4.27 and were used to evaluate the relationships between mothers' careers/occupations and students' responses to plagiarizing others' work. The relationships were not statistically significant at the critical level ($\chi^2 = 15.110, p = 0.019$).

Table 4.27

Count, Expected Count, Mothers' and Fathers' Occupation Levels using Chi-Square Analysis of Group Differences

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.110 ^a	6	.019	4.765 ^b	6	.574
Likelihood Ratio	14.062	6	.029	5.575	6	.472
Linear-by-Linear Association	.001	1	.970	.643	1	.423
N of Valid Cases	873			840		

^a 2 cells (14.3%) have expected count less than 5. The minimum expected count is 1.07.

^b 1 cell (7.1%) have expected count less than 5. The minimum expected count is 3.85.

Impact of Fathers' Career/Occupation on Plagiarism

Table 4.26 contains responses to items 9b and 27 and provides details of the cross-tabulation. Respondents were asked to indicate whether they did plagiarize other peoples' work (9b), and to indicate and to state their fathers' occupation/career (27). The careers/occupations of fathers ranged from unemployed or retired to construction.

The total number of students who reported fathers' careers/occupation as unemployed/retired was about 4% ($n = 32$), in management/ finance/business as 27% ($n = 231$), in professional careers as 15% ($n = 126$), as service specialists as 23% ($n = 193$), in sales as 6% ($n = 54$), in farming/fishing/forestry as 9% ($n = 73$), and in construction as 16% ($n = 131$). Approximately 88% ($n = 739$) of the students with fathers' occupation/career ranging from unemployed/retired to construction stated that they did not plagiarize other peoples' work. The remaining 12% ($n = 101$) confirmed that they did plagiarize other peoples' work. Of this group, 1% ($n = 1$) of students had fathers

in unemployment/retired category admitted plagiarizing other peoples' work, 30% ($n = 30$) in management/business/finance, 12% ($n = 12$) in the professional category, 24% ($n = 24$) in services, 6% ($n = 6$) in sales, 12% ($n = 12$) in farming/fishing/forestry, and 15% ($n = 16$). The emerging pattern suggests fewer students plagiarized when parents' were in blue collar occupation/careers (i.e., farming/fishing/forestry, and construction) than in white collar occupation/careers (i.e., management/business/finance, professional, service, and sales).

In Table 4.27, chi-square test was performed to determine if there was a significant relationship between fathers' occupations (i.e., unemployed/retired, management/business/finance, and students' plagiarism. The relationships were not statistically significant at the critical alpha level ($\chi^2 = 4.765$, $p = 0.574$). Therefore, the null hypothesis should be accepted.

Evaluation of Parents' Support and Students' Plagiarism

The purpose of this section is to assess whether parents' support or the lack of it influences students' engagement in plagiarism. In this regard, the findings are presented in Table 4.28.

Table 4.28

Cross Tabulation of Students' Responses to Plagiarizing Work of Others, Extent of Parents' Support, and Frequencies

Students' response	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents' Support			Students Reported Being Independent of Parents	Total
			Parents Paid for Extra lessons	Neither Academic Help nor Financial Support Provided by Parents			
Did not Plagiarize Work of Others	237	38	225	43		262	805
Plagiarized Work of Others	24	7	48	8		23	110
Total	261	45	273	51		285	915

The number of students who reported support from one or both parents was 28% ($n = 261$), 5% ($n = 45$) attributed to parents who seek outside support for students, 30% ($n = 273$) credited with paying extra lesson fees, 6% ($n = 51$) was provided neither with academic nor financial support, and 31% ($n = 285$) reporting being independent of their parents. About 88% ($n = 805$) of students (received support ranging from one or both parents to none due to their own independence) reported they did not plagiarize. The remaining 12% ($n = 110$) reported they did plagiarize. Of this group who admitted to plagiarizing, about 22% ($n = 24$) received support from one or both parents, 6% ($n = 7$) had parents who obtained outside help, 44% ($n = 48$) had parents paid for extra lessons, 7% ($n = 8$) had parents who gave no form of support, and 21% ($n = 23$) reported they were independent of their parents.

The chi-square statistic as presented in Table 4.29 was performed to evaluate the relationships between parents' support (i.e., one or both parents assisted, outside help received from other students, parents paid for extra lessons, no academic help or financial support, and students' independent from parents) and plagiarism. Chi-square statistic was significant at the critical level ($\chi^2 = 15.339, p < 0.01$). It can be concluded there is significant relationships between parents' support and students' plagiarism. Therefore, the null hypothesis should be rejected.

Table 4.29

Count, Expected Count, and Chi-Square Analysis on Group Differences based on Level of Parents' Support

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.339 ^a	4	.004
Likelihood Ratio	15.020	4	.005
Linear-by-Linear Association	.233	1	.629
N of Valid Cases	915		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.41.

Relationship between Using Other Students' Materials and Mothers' Age

To further answer the research question on the relationship between academic conduct and parents' age, this section presents the discussion on mothers. The cross-tabulated results are reported in Table 4.30.

Table 4.30

Cross Tabulation of Students' Responses to Use of Other Students' Materials, Mothers' and Fathers' Age, and Frequencies

	Mothers' Age				Father's Age			
	<50	>50	No longer alive	Total	<50	>50	No longer alive	Total
Did not use other students' materials	385	398	51	834	253	444	111	808
Did use other students' materials	50	35	3	88	35	46	7	88
Total	435	433	54	922	288	490	118	896

Table 4.30 contains responses to items 9c and 25. Respondents were asked to indicate whether they did use other students' materials (9c), and to indicate their mothers' age. The total number of students who reported their mothers' age under 50 was 47%

($n = 435$) while another 47% ($n = 433$) stated their mother's age as over 50, and the remaining 6% ($n = 54$) was deceased. Approximately 90% ($n = 834$) of the students (with mothers under and over 50) stated that they did not use other students' materials. The remaining 10% ($n = 88$) did use other students' materials. Of this group, about 57% of the students ($n = 50$) had younger mothers (i.e., < 50) admitted that within the last two years they did use other students' materials while 40% ($n = 35$) with older mothers stated they used other students' materials. The 3% ($n = 3$) who reported their mother as deceased indicated they did use other students' materials. Hence there is a declining pattern in cheating among students who had mothers older than 50 or who were deceased. The chi-square tests are shown in Table 4.31.

Table 4.31

Count, Expected Count, and Chi-Square Analysis on Group Differences based on Mothers' and Fathers' Age

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.982 ^a	2	.137	3.887 ^b	2	.143
Likelihood Ratio	4.088	2	.129	4.007	2	.130
Linear-by-Linear Association	3.947	1	.047	3.856	1	.050
N of Valid Cases	922			896		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.15.

^b 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.59.

Chi-square results presented in Table 4.31 were used to assess the relationships between mothers' age (i.e., <50 , >50 , deceased) and students' responses to using other students' materials. The chi-square statistic was not significant at the critical level ($\chi^2 =$

3.982, $p = 0.137$) and there is not a relationship between mothers' age and use of other students' materials.

Relationship between Using Other Students' Materials and Fathers' Age

This section assesses fathers' age with the extent to which participants use other students' materials without acknowledgement. Table 4.30 contains responses to items 9c and 25. Respondents were asked to indicate whether they did use other students' materials (9c), and to indicate their fathers' age (25). The total number of students who reported their fathers' age under 50 was 32% ($n = 288$) while 55% ($n = 490$) stated their father' age as over 50, and 13% ($n = 118$) was deceased. Approximately 90% ($n = 808$) of the students (with fathers under and over 50) stated that they did not use other students' materials. The remaining 10% ($n = 88$) confirmed that they did use other students' materials. Of this group who admitted that within the last two years they did use other students' materials, about 40% of the students ($n = 35$) had younger fathers (< 50 years) and 52% ($n = 46$) had older fathers. The remaining 8% ($n = 7$) who reported their fathers as deceased indicated they did use other students' materials. Hence there is a pattern in more students' using materials among students with older fathers (i.e., > 50).

Chi-square results presented in Table 4.31 was used to assess the relationships between fathers' age (i.e., <50, >50, and deceased fathers) and students' responses to using other students' materials. The chi-square statistic was not significant at the critical level ($\chi^2 = 3.887$, $p = 0.143$). There is no relationship between fathers' age and use of other students' materials.

Use of Other Students' Materials and Parental Support

A cross-tabulation was done to relate level of parental support (Item 28) and extent of participants' use of other students' materials (Item 9c). These results are in the cross tabulation table contained in Table 4.32.

Table 4.32

Cross Tabulation of Students' Responses on Use of Other Students' Materials, Varying Degree of Parents' Support, and Frequencies

Students' response	Parents' Support					Total
	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents Paid for Extra Lessons	Neither Academic Help nor Financial Support Provided by Parents	Students Reported Being Independent of Parents	
Did not use other students' materials	236	38	237	45	271	827
Did use other students' materials	25	7	36	6	14	88
Total	261	45	273	51	285	915

The total number of students who reported support from one or both parents was 29% ($n = 261$), 5% ($n = 45$) attributed to who seek outside support for students, 30% ($n = 273$) credited with paying extra lesson fees, 6% ($n = 51$) provided neither with academic nor financial support, and 30% ($n = 285$) reporting as being independent of their parents. About 90% ($n = 827$) of students (ranging from one or both parents to none due to their own independence) reported they did not use other students' materials. The remaining 10% ($n = 88$) reported they did use other students' materials. Of this group, about 28% ($n = 25$) received support from one or both parents, 8% ($n = 7$) had parents who obtained outside help, 41% ($n = 36$) had parents paid for extra lessons, 7% ($n = 6$) had parents who gave no form of support and 16% ($n = 14$) who reported as being independent of their parents.

The chi-square tests, presented in Table 4.33, were performed to evaluate the relationships between students' response to using other students' work and parents' support. The chi-square statistic was significant at the critical level ($\chi^2 = 13.356$, $p < 0.01$). It can be concluded there is significant relationship between parents' support (i.e., one or both parents' assisted, parents seek outside from other students, parents paid for extra lessons, no academic or financial support provided by parents, and reported independence from parents) and students' plagiarism.

Table 4.33

Count, Expected Count, and Chi-Square Analysis based on Differences in Parents' Support

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.356 ^a	4	.010
Likelihood Ratio	14.143	4	.007
Linear-by-Linear Association	4.012	1	.045
N of Valid Cases	915		

^a 2 cells (.0%) have expected count less than 5. The minimum expected count is 4.33.

Copy and Paste Phenomenon and Parents' Age

An assessment was done to determine the association between extent of copy and paste from Internet among participants (Item 9d) and the age of their parents (Item 25).

Table 4.34

Cross Tabulation of Students' Response to Copy and Paste, Mothers' and Fathers' Age, and Frequencies

	Mothers' Age				Father's Age			
	<50	>50	No longer alive	Total	<50	>50	No longer alive	Total
Did not copy and paste	225	281	38	544	145	306	74	525
Did copy and paste	210	152	16	378	143	184	44	371
Total	435	433	54	922	288	490	118	896

Respondents were asked to indicate whether or not they did copy and paste Internet materials into their own work/papers and their mothers' age. The total number of students who reported their mothers' age under 50 was 47% ($n = 435$) while another 47% ($n = 433$) stated their mother' age as over 50, and the remaining 6% ($n = 54$) was deceased. Approximately 59% ($n = 544$) of the students (with mothers under and over

50) stated that they did not copy and paste Internet materials into their own work/papers. Forty-one percent ($n = 378$) with mothers under and over 50 confirmed they did copy and paste Internet materials into their own work/papers. Of this group who cut and paste,, about 56% of the students ($n = 210$) had younger mothers (< 50 years), 40% ($n = 152$) had older mothers, and 4% ($n = 16$) who reported their mother as deceased.

Table 4.34 contains responses to items 9(d) and 25(f). Respondents were asked to indicate if they had copied and pasted Internet materials. They were also asked to report their fathers' age. The total number of students who reported their fathers' age under 50 was 32% ($n = 288$) while another 55% ($n = 490$) stated their fathers' age as over 50, and the remaining 13% ($n = 118$) was deceased. Approximately 59% ($n = 525$) of the students (with fathers under and over 50) stated that they did not copy and paste Internet materials into their own work/papers. The 41% ($n = 371$) with fathers confirmed they did copy and paste Internet materials into their own work/papers. Of this group, about 39% of the students ($n = 143$) had younger fathers (< 50 years) admitted that within the last two years they did copy and paste Internet materials into their own work/papers while 50% ($n = 184$) with older fathers stated they too did the same thing. The remaining 11% ($n = 44$) (fathers deceased) indicated they did copy and paste Internet materials into their own work/papers.

The chi-square tests in Table 4.35 were computed to evaluate the relationships between students' responses to involvement in copying and pasting Internet materials in their assignments and their fathers' age. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 11.899, p = < 0.01$). Hence, it can be concluded there is

significant relationship between fathers' age (i.e., <50, <50, and deceased father), and copying and pasting by students. There were similar findings for mothers ($\chi^2 = 18.629$, $p = < 0.01$). Therefore, the null hypothesis should be rejected.

Table 4.35

Counts, Expected Count, and Chi-Square Analysis based On Differences in Mothers' and Fathers' Age with respect to Copy/Paste Actions

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.629 ^a	2	.000	11.899 ^b	2	.003
Likelihood Ratio	18.717	2	.000	11.822	2	.003
Linear-by-Linear Association	17.794	1	.000	9.017	1	.003
N of Valid Cases	922			896		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.14.

^b 0 cells (.0%) have expected count less than 5. The minimum expected count is 48.86.

Influence of Mothers' Education on Students' Confirmation of Copying and Pasting

Table 4.36 contains the cross-tabulated students' responses in terms of whether or not they did copy and paste Internet materials into their own work without appropriate citation (Item 9d) and their mothers' education (item 26).

Table 4.36

Cross Tabulation on Students' Response to Copy and Paste, Mothers' and Fathers' Education Level and Frequencies

Students' response	Mother's Education						Father's Education					
	≤ High School	Some College	BA/BS	MA/MS	PhD	Total	≤ High School	Some College	BA/BS	MA/MS	PhD	Total
Did not copy and paste	259	137	90	43	8	537	288	87	79	49	17	520
Did copy and paste	225	75	50	20	2	372	222	57	49	17	5	350
Total	484	212	140	63	10	909	510	144	128	66	22	870

The total number of students who reported their mothers' education as high school diplomas or less was 53% ($n = 484$), some college education as 23% ($n = 212$), bachelor's degrees as 15% ($n = 140$), master's degrees as 7% ($n = 63$), and doctorates as 2% ($n = 10$). Approximately 59% ($n = 537$) of students (mothers' education ranging from high school diplomas and less to doctorates) stated they did not copy and paste Internet materials into their work/papers. The 41% ($n = 372$) reported they did copy and paste Internet materials into their work/papers. Of this group who admitted to copying and pasting Internet materials into their work/papers, about 60% ($n = 225$) had mothers with high school diploma and less, 20% ($n = 75$) with some college, 13% ($n = 50$) with bachelor's degrees, 6% ($n = 20$) with master's degrees, and 1% ($n = 2$) with doctorates. The pattern is as mothers' higher levels of education there is a decrease in the percentages of students' who admitted to copy and paste Internet materials into their work/papers (without the appropriate citation).

A chi-square tests was performed (see Table 4.37) to assess if there was a significant relationship between mothers' education (i.e., <high school, some college, BA/BS, MA/MS, and PhD) and students response to Internet copy and paste of Internet materials. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 14.472$, $p < 0.01$). It can be concluded there is significant relationship between mothers' education and students' copying and pasting.

Table 4.37

Counts, Expected Count, and Chi-Square Analysis based on Differences relative to Mothers' and Fathers' Education Levels

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.472 ^a	4	.006	11.088 ^b	4	.026
Likelihood Ratio	14.711	4	.005	11.630	4	.020
Linear-by-Linear Association	12.080	1	.001	9.778	1	.002
N of Valid Cases	909			870		

^a 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.09.

^b 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.85.

Students' were asked to indicate whether or not they did copy and paste Internet materials into assignments/paper (Item 9d), and to state their fathers' education (Item 26). These results are provided in Table 4.36. The total number of students who reported their fathers' education as high school diplomas or less was 59% ($n = 510$), with some college education as 16% ($n = 144$), with bachelor's degrees as 15% ($n = 128$), with master's degrees as 8% ($n = 66$), and with doctorates as 2% ($n = 22$). Approximately 60% ($n = 520$) of students (fathers' education ranging from high school diplomas and less to doctorates) stated they did not copy and paste Internet materials into their work/papers. Forty percent ($n = 350$) reported they did copy and paste Internet materials into their work/papers. Of this group, about 63% ($n = 222$) had fathers with high school diploma and less, 16% ($n = 57$) some college, 14% ($n = 49$) bachelor's degrees, 5% ($n = 17$) master's degrees, and the remaining 2% ($n = 5$) with doctorates. The pattern is that as the

category of fathers' education level progresses the percentage of students' who admitted to copy and paste Internet materials into their work/papers tend to decrease.

Table 4.37 provides the results of the chi-square tests used to assess whether there is a significant relationship between fathers' education (i.e., <high school, some college, BA/BS, MA/MS, and PhD) and response to Internet copying and pasting in assignments (without proper citation). The chi-square statistic was not significant at the critical alpha level ($\chi^2 = 11.088, p = 0.026$). The conclusion is there is no relationship between fathers' education and students' copying and pasting from the Internet.

Participants' Copy and Paste Action and Impact of Parent' Support

In this section the impact of parents' support with participants' involvement in copy and paste of Internet materials into assignments. The results shown in the Table 4.38 are students' responses to copying and pasting Internet materials into assignments and parents' support.

Table 4.38

Cross Tabulation of Students' Responses to Copy and Paste Internet Materials, Varying Degree of Parents' Support, and Frequencies

Students' response	Parents' Support					Total
	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents Paid for Extra Lessons	Neither Academic Help nor Financial Support Provided by Parents	Students Reported Being Independent of Parents	
Did not copy and paste	153	25	134	30	199	541
Did copy and paste	108	20	139	21	86	374
Total	261	45	273	51	285	915

The total number of students who reported support from one or both parents was 28% ($n = 261$), 5% ($n = 45$) reported their parents did seek outside support for them, 30% ($n = 273$) stated their parents did pay for extra lesson, 6% ($n = 51$) provided neither with academic nor financial support, and 31% ($n = 285$) stated they were independent of their parents. About 59% ($n = 541$) of students who received support (from one or both parents to none due to their own independence) reported they did not copy and paste Internet materials into their assignments. The 41% ($n = 374$) reported they did copy and paste Internet materials into their assignments. Of this group who admitted to copy and paste Internet materials, about 29% ($n = 108$) received support from one or both parents, 5% ($n = 20$) had parents who obtained outside help, 37% ($n = 139$) parents paid for extra lessons, 6% ($n = 21$) parents who gave no form of support, and 23% ($n = 86$) reported being independent of their parents. In this group, parent support is varied in that although parents paid for extra lessons, the highest percentages of students admitted to copying and pasting came from this category.

Table 4.39 provides the results of a Pearson's chi-square tests performed to assess if there was a significant relationship between parents' support and students' responses to copying and pasting. The chi-square statistic was significant at the critical level ($\chi^2 = 25.156, p < 0.01$). It can be concluded there is significant relationship between parents' support (i.e., one or both parents assisted, parents seek outside help from other students, parents paid for extra lessons, no academic or financial support provided by parents, students being independent of parents) and students' copying and pasting.

Table 4.39

Counts, Expected Count, and Chi-Square Analysis Based on Differences relative to Varying Levels of Parents' Support

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.156 ^a	4	.000
Likelihood Ratio	25.449	4	.000
Linear-by-Linear Association	7.687	1	.006
N of Valid Cases	915		

^a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.39.

Influence of Parents' Support when Students Ignore Faculty Instructions

This section discusses the relationship between the support that students receive when they are struggling academically and the help they get from other students, an action not authorized by their instructors. To assess this relationship, a cross-tabulation was done between Item 9e (students' responses to action taken contrary to faculty instructions) and Item 28 (parents' support). See Table 4.40.

Table 4.40

Cross Tabulation of Students' Response to Action Taken Contrary to Faculty Instruction, Parents' Support, and Frequencies

Students' response	Parents' Support					Total
	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents Paid for Extra Lessons	Neither Academic Help nor Financial Support Provided by Parents	Students Reported Being Independent of Parents	
Did not act contrary to instruction	178	28	179	38	237	660
Did act contrary to instruction	83	17	94	13	48	255
Total	261	45	273	51	285	915

The total number of students who reported support from one or both parents was 28% ($n = 261$), 5% ($n = 45$) reported their parents did seek outside support for them, 30% ($n = 273$) stated their parents did pay for extra lesson, 6% ($n = 51$) was provided neither with academic nor financial support, and 31% ($n = 285$) stated they were independent of their parents. About 72% ($n = 660$) of students who received support ranging from one or both parents to none due to their own independence reported they did not act contrary to faculty instructions. The remaining 28% ($n = 255$) reported they did copy act contrary to faculty instructions. Of this group who admitted to act contrary to faculty instructions, about 32% ($n = 83$) received support from one or both parents, 7% ($n = 17$) had parents who obtained outside help, 37% ($n = 94$) had parents paid for extra lessons, 5% ($n = 13$) had parents who gave no form of support and 19% ($n = 48$) who reported as being independent of their parents.

The pattern is that although the first three columns represent substantial support obtained from parents (i.e., one or both parents, parents asked other students to assist, and parents paid for extra lessons), cumulatively, 76% ($n = 194$) of the students admitted they did act contrary to instructions from faculty.

The chi-square tests results are presented in Table 4.41, and assesses whether there are significant relationships between parents' support and students' responses to faculty instruction. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 27.438, p < 0.01$). Furthermore, it can be concluded there is a relationships between parents' support and students' response to faculty instruction.

Table 4.41

Counts, Expected Count, and Chi-Square Analysis based on Differences in Parents' Support when Students' Ignore Faculty Instruction

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.438 ^a	4	.000
Likelihood Ratio	28.854	4	.000
Linear-by-Linear Association	17.307	1	.000
N of Valid Cases	915		

^a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.54.

Academic Dishonesty and Parents' Age

The purpose of this section is to assess the cross tabulations results between students' involvement in academic dishonesty and parents' age. See Table 4.42.

Table 4.42

Cross Tabulation of Students' Responses to Involvement in Academic Dishonesty, Mothers' and Fathers' Age, and Frequencies

Academic Dishonesty	Mothers' Age				Father's Age			
	<50	>50	No longer alive	Total	<50	>50	No longer alive	Total
Involved in	274	205	19	498	180	249	57	486
Not involved in	161	228	35	424	108	241	61	410
Total	435	433	54	922	288	490	118	896

Item 9(f) solicits students' responses to involvement in academic dishonesty, and mothers' age (Item 25). The responses are reported in Table 4.42. Overall, the total number of students who reported their mothers' age under 50 was 47% ($n = 435$) while another 47% ($n = 433$) stated their mothers' age as over 50, and the 6% ($n = 54$) was deceased. Approximately 46% ($n = 424$) of the students (with mothers under and over

50) stated they had never been involved in any form of academic dishonesty. About 54% ($n = 498$) with mothers under and over 50 confirmed that they did get involved in academic dishonesty. Of this group, about 55% of the students ($n = 274$) had younger mothers (< 50 years) admitted, within the last two years of college, they did get involved in academic dishonesty while 41% ($n = 205$) had older mothers stated they too did the same. The remaining 4% ($n = 19$) who reported their mothers as deceased indicated they did get involved in academic dishonesty.

From this analysis, the level of students' involvement in academic dishonesty reduces (i.e., from 55% to 4%) with older mothers', or are no longer alive (i.e., from under 50 to over 50 years).

Table 4.43 provides the results of the Pearson chi-square tests used to assess if there was a significant relationship between mothers' age and students' involvement in academic dishonesty. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 29.568, p < 0.01$). Therefore, it can be concluded there is a significant relationship between mothers' age and academic dishonesty among students.

Table 4.43

Counts, Expected Count, and Chi-Square Analysis Based on Mothers' and Fathers' Age, and Students' Involvement in Academic Dishonesty

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.568 ^a	2	.000	11.905 ^b	2	.003
Likelihood Ratio	29.783	2	.000	12.004	2	.002
Linear-by-Linear Association	29.373	1	.000	10.208	1	.001
N of Valid Cases	922			896		

^a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.83.

^b 0 cells (0.0%) have expected count less than 5. The minimum expected count is 54.00.

Table 4.42 also provides students' responses to involvement in academic dishonesty (Item 9f) and fathers' age (Item 25). The students who reported their fathers' age under 50 were 32% ($n = 288$) while another 55% ($n = 490$) stated their fathers' age as over 50, and 13% ($n = 118$) was deceased. Approximately 46% ($n = 410$) of the students (with fathers under and over 50 including those deceased) stated that they had not been involved in any form of academic misconduct in the last two years of college. The remaining 54% ($n = 486$) with fathers under and over 50 (including deceased fathers) confirmed they had committed academic misconduct. Of this group, about 37% of the students ($n = 180$) with younger fathers (< 50 years) admitted to academic misconduct within the last two years of college, and 51% ($n = 249$) with older fathers (> 50) did the same. The remaining 12% ($n = 57$) who reported their fathers as deceased, indicated they too committed academic misconduct in the last two years. The pattern shows as fathers' age increases (i.e., from under 50 to over 50), students' involvement in academic dishonesty also increases (i.e., from 37% to 51%).

Table 4.43 also provides the results of the chi-square tests used to assess whether there was significant relationship between fathers' age and students' involvement in academic dishonesty. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 11.905, p < 0.01$). Hence, it can be concluded there is a significant relationship between fathers' age and academic dishonesty among students.

Academic Integrity and Parents' Support

Table 4.44 contains the cross-tabulated results of students' responses to involvement in academic dishonesty (Item 9f), and the level of parents' support

(Item 28). Overall, the total number of students who reported support from one or both parents was 28% ($n = 261$), 5% ($n = 45$) reported their parents did seek outside support for them, 30% ($n = 273$) stated their parents did pay for extra lesson, 6% ($n = 51$) provided neither with academic nor financial support, and 31% ($n = 285$) stated they were independent of their parents. About 46% ($n = 423$) of students who received support (from one or both parents to none due to their own independence) reported they did not commit academic misconduct. The remaining 54% ($n = 492$) reported they did commit academic misconduct. Of this group who admitted to involvement in academic misconduct, about 29% ($n = 145$) received support from one or both parents, 5% ($n = 26$) had parents who obtained outside help, 36% ($n = 177$) had parents paid for extra lessons, 6% ($n = 31$) had parents who gave no form of support and 24% ($n = 113$) who reported being independent of their parents.

Table 4.44

Cross Tabulation of Students' Responses to Involvement in Academic Dishonesty, Parents' Support, and Frequencies

Students' response	Parents' Support					Total
	One or Both Parents Assisted	Parents Seek Outside Help from Other Students	Parents Paid for Extra Lessons	Neither Academic Help nor Financial Support Provided by Parents	Students Reported Being Independent of Parents	
Involved in Academic Dishonesty	145	26	177	31	113	492
Not involved in Academic Dishonesty	116	19	96	20	172	423
Total	261	45	273	51	285	915

Pearson's chi-square test was computed (See Table 4.45) to assess if there was a significant relationship between parents' support and students' involvement in academic dishonesty. The findings indicate there was significance at the critical level ($\chi^2 = 37.943$, $p < 0.01$). Therefore, it can be concluded there is significant relationship between parents' support and students' involvement in academic dishonesty.

Table 4.45

Counts, Expected Count, and Chi-Square Analysis based on Varying Levels of Parents' Support

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.943 ^a	4	.000
Likelihood Ratio	38.207	4	.000
Linear-by-Linear Association	13.679	1	.000
N of Valid Cases	915		

^a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.80.

Students' Academic Standing and Parents' Age

In Table 4.46 students were asked to indicate their responses to academic standing (Item 34) denoted by freshman, sophomore, junior, and senior, and their mothers' age (item 25). Table 4.46 reports items 34 and 25, respondents' academic standing (34) and their mothers' ages (25). The total number of students who reported their mothers' age under 50 was 46% ($n = 453$) while 47% ($n = 462$) stated their mothers' age as over 50, and 7% ($n = 58$) was deceased. Approximately 31% ($n = 301$) of the students (had mothers under and over 50, including those deceased) reported academic standing were freshmen. Of this group, 60% ($n = 181$) reported mothers' age as < 50 , 35% ($n = 106$) as > 50 , and 5% ($n = 14$) as deceased. About 25% ($n = 245$) of students (with mothers under 50 and over 50, including those reported as deceased) reported academic standing

as sophomores. Of this group, 49% ($n = 120$) stated their mothers' age as <50, 44% ($n = 108$) as > 50, and 7% ($n = 17$) as deceased. Approximately 23% ($n = 221$) of students (with mothers under 50 and over 50, including those reported as deceased) reported academic standing as juniors. Of this group, 38% ($n = 84$) stated their mothers' age as <50; 56% ($n = 123$) > 50, and 6% ($n = 14$) as deceased. Seniors accounted for 21% ($n = 206$). Of this group, 33% ($n = 68$) reported their mother' age as < 50; 61% ($n = 125$) as > 50, and 6% ($n = 13$) as deceased.

Table 4.46

Cross Tabulation of Students Responses to Academic Standing, Mothers' and Fathers' Age Frequencies

Academic Standing	Mothers' Age				Father's Age			
	<50	>50	No longer alive	Total	<50	>50	No longer alive	Total
Freshman	181	106	14	301	135	127	31	293
Sophomore	120	108	17	245	71	124	44	239
Junior	84	123	14	221	52	137	27	216
Senior	68	125	13	206	45	126	26	197
Total	453	462	58	973	303	514	128	945

Students with younger mothers (< 50) accounted for the largest group within freshmen ($n = 181$, 60%) and sophomores' ($n = 120$, 49%). A similar pattern emerged for students with older mothers (> 50) in that, juniors ($n = 123$, 56%) and seniors ($n = 125$, 61%) were the larger groups.

In Table 4.47 the chi-square test was performed to determine if there was statistical relationship between students' academic standing and mothers' age. The chi-square statistic was significant at the critical level ($\chi^2 = 45.968$, $p < 0.01$). It can be

concluded there is significant relationship between students' academic standing and mothers' age.

Table 4.47

Expected Counts, Count, and Chi-Square Analysis based on Mothers' and Fathers' Age relative to Students' Academic Standing

	Mother			Father		
	Value	df	Asymp. Sig. (2-sided)	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.968 ^a	6	.000	47.555 ^b	6	.000
Likelihood Ratio	46.341	6	.000	46.296	6	.000
Linear-by-Linear Association	33.349	1	.000	19.773	1	.000
N of Valid Cases	973			945		

^a 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.28.

^b 0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.688.

A cross tabulation was also done to assess the relationship between students' academic standing and fathers' age. Table 4.46 contains responses to items 34 and 25. Respondents were asked to report their academic standing (34), and to state their fathers' age (25). The total number of students who reported their fathers' age under 50 was 32% ($n = 303$) while another 54% ($n = 514$) stated their fathers' age as over 50, and the remaining 14% ($n = 128$) was deceased. Approximately 31% ($n = 293$) of the students both with fathers under and over 50, and including those deceased reported academic standing were freshmen. Of this group, 46% ($n = 135$) reported fathers' age as < 50 ; 43% ($n = 127$) as > 50 , and 11% ($n = 31$) as deceased. About 25% ($n = 245$) of students both with fathers under 50 and over 50, and including those reported as deceased reported academic standing as sophomores. Of this group, 30% ($n = 71$) stated their fathers' age as < 50 ; 52% ($n = 124$) as > 50 , and 18% ($n = 44$) as deceased. Approximately 23% ($n =$

216) of students both with fathers under 50 and over 50, and including those reported as deceased reported academic standing as juniors. Of this group, 24% ($n = 52$) stated their fathers' age as < 50 ; 64% ($n = 137$) as > 50 , and 12% ($n = 27$) as deceased. Seniors accounted for 21% ($n = 197$). Of this group, 23% ($n = 45$) reported their mother' ages as < 50 ; 64% ($n = 126$) as > 50 , and 13% ($n = 26$) as deceased.

The pattern is that students with younger fathers (< 50) accounted for the largest group as freshmen academic standing ($n = 135$; 46%). A more dominant pattern emerged among students with older fathers (> 50). Sophomores ($n = 124$; 52%), juniors ($n = 137$; 64%), and seniors ($n = 126$; 64%) were the groups with the three highest percentages. However, caution must be exercised when interpreting the results.

In Table 4.47 the chi-square test was computed to assess if there was a significant relationship between fathers' age and students' academic standing. Based on the chi-square statistic there was significance at the critical alpha level ($\chi^2 = 47.555$, $p < 0.01$). Furthermore, it can be concluded there is a significant relationship between academic standing and fathers' age.

Religion and Academic Dishonesty

In this section the discussion on influence of religion on academic dishonesty is provided in the context of its relationship to five paired variables (awareness of academic conduct, perception of academic conduct, character traits, honor code and self-esteem. The justification for this approach is that the primary data were given through the lens of participants, not from their parents.

On item 30, participants were asked to indicate their responses to the statement, "*My parent(s) display a strong religious belief.*" This was rated on the Likert scale (i.e.,

strongly agree to strongly disagree). Overall, 989 valid responses were received (missing data= 28). Of this number, 43% (n = 427) indicated *strongly agree*, 41% (n = 405) noted *agree*, 14% (n = 135) stated *disagree*, and the other 2% (n = 22) recorded *strongly disagree*. On item 31, participants were asked to indicate their responses to the statement, “*My parent(s) believe there is a strong connection between religion and honesty.*” This was rated on the Likert scale. Overall, 991 valid responses were obtained (missing = 26). Of this number, 43% (n = 425) indicated *strongly agree*, 42% (n = 419) noted *agree*, 12% (n = 118) stated *disagree*, and the remaining 3% (n = 29) recorded *strongly disagree*.

To gain a better understanding of the role of parents’ religious belief in academic dishonesty, religion was compared with awareness of academic conduct, perception of academic conduct, character traits, honor code, and self-esteem. These outputs are presented in Table 4.48, which shows the mean and standard deviations of six variables including religion. A mean closer to a scale score of 4.00 is considered favorable (positive conduct) while a low scale score of 1.00 is considered unfavorable conduct (negative conduct). Therefore, the calculated mean of 3.27 for religion suggests it influenced conduct in a positive manner.

In Table 4.49, religion was further evaluated to assess its relationship with students’ awareness of academic conduct, perception of academic conduct, character traits, honor code, and self-esteem. Pearson’s correlations were computed using each of these pairs: religion and awareness of academic conduct; religion and perception of academic conduct; religion and character traits; religion and honor code; and religion and self esteem. Except for self esteem and religion which showed negative correlation

($r = -.21, p = .01$), each variable paired with religion showed positive relationships. The largest correlation was between religion and perception of academic conduct ($r = .24, p = 0.01$) and religion and character traits ($r = .24, p = .01$). The researcher concludes that the positive relationships, though small, between religion and awareness of academic conduct, religion and perception of academic conduct, religion and character traits, and religion and honor code suggest that they are directly related. In other words, because the r -values (though small) are greater than zero there is a positive linear relationship between each of these pairs. In contrast, the r -value for religion and self esteem is less than zero, it is negative, indicates the existence of a negative relationship. That is, they are inversely related. However, caution should be exercised in the interpretation of the results particularly as the r -squared values are negligible. These range from .025 (2.5%) to 0.056 (6%). At best 6% of the variability in these relationships can be explained.

Table 4.48

Simple Statistics on Variable Scales

Variable	N	M	SD	Sum	Min.	Max.
Awareness of Academic Conduct	975	2.93	0.41	2,857	1.50	4.00
Perception of Academic Conduct	976	3.34	0.56	3,266	1.33	4.00
Character Traits	974	2.93	0.50	2,862	1.00	4.00
Honor Code	968	2.72	0.67	2,634	1.00	4.00
Religion	953	3.27	0.71	3,119	1.00	4.00
Self-Esteem	956	1.77	0.35	1,696	1.00	3.06

Table 4.49

Pearson Correlation Coefficients

Variable	Awareness of Academic Conduct	Perception of Academic Conduct	Character Traits	Honor Code	Religion	Self-Esteem
Religion	0.22 <.0001 953	0.24 <.0001 953	0.24 <.0001 953	0.16 <.0001 947	1.00 953	0.21 <.0001 944

Research Question 6

Is there a relationship between self-esteem and students' academic conduct?

To answer this question, the results of item 9(a) through 9(f) were evaluated. For this item participants were asked to circle all items (a – f) for which they may have been engaged. Item 9(a) represents cheating on tests, 9(b) for plagiarizing others' work, 9(c) for using other students materials without acknowledging credit, 9(d) for copying and pasting Internet materials into assignments without proper citation, 9(e) obtaining help contrary to faculty instruction, and 9(f) not involved in any form of academic dishonesty. Thereafter, the question concludes with an evaluation on self-esteem and academic dishonesty

Cheating on Tests and Academic Dishonesty

Table 4.50 was compiled from the results in which respondents indicate whether or not they cheated on tests (Item 9a). The assessment of conduct is also based the mean. Overall, about 88% ($n = 829$) of respondents stated that they did not cheat on tests while 12% ($n = 118$) noted otherwise. The conduct scale ranges from 1–4. The higher the mean (closer to 4) is the more positive (better) the outlook on academic conduct. Therefore, a value of 4 translates to positive conduct (i.e., better conduct) while a value of 1 represents a negative conduct (i.e., respondents think other people are dishonest). The mean of the conduct scale were based on six items (2, 4, 16, r17, r18, r41). The mean, 2.93, represents an awareness of positive conduct. For this study, a score above 2.50 is interpreted as *people are more honest*. A closer look at Table 4.50 reveals that 12% ($n = 118$) of the

respondents think that people are less honest (mean of 2.42). Approximately 88% ($n = 829$) think that people are honest with an associated mean of 2.93.

Table 4.50

Awareness of Academic Conduct based on responses to Cheating on Test

Responses to Dishonesty	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did not cheat on tests	829	2.93	.45	.01	2.90	2.96
Did cheat on tests	118	2.42	.45	.04	2.34	2.50
Total	947	2.87	.48	.01	2.83	2.90

A one-way ANOVA was used to compare students' responses to cheating on tests (did not cheat on tests or did cheat on tests) and students' awareness of academic conduct. These results are presented in Table 4.51. In this case a statistically significant F ratio was found between the groups, $F = 129.252$, $p < .01$. The findings appeared to be influenced by the fact that 88% ($n = 829$) of the students having reported they did not cheated on tests, had a higher mean ($M = 2.93$) than those who did ($M = 2.42$). Hence, the difference was not due to chance.

Table 4.51

ANOVA: Awareness of Academic Conduct

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	26.498	1	26.498	129.252	.000
Within Groups	193.731	945	.205		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(a)

Plagiarize Other Peoples' Work and Academic Dishonesty

The statistics in Table 4.52 are based on cases with no missing data and incorporate valid responses of 947 participants. In this case participants were asked to indicate whether or not they plagiarized other peoples' work. Approximately 88% ($n = 834$) stated that they did not, while 12% ($n = 113$) confirmed they did. The mean for those respondents who stated that they did not plagiarize (mean = 2.91) was higher than respondents who confirmed that they did plagiarized (mean = 2.61).

Table 4.52

Descriptive: Awareness of Academic Conduct based on Plagiarizing others' work

Responses to Dishonesty	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did not plagiarize	834	2.91	.47	.02	2.87	2.94
Did plagiarize	113	2.61	.47	.04	2.52	2.69
Total	947	2.87	.48	.02	2.84	2.90

A one-way ANOVA was used to compare students' responses to plagiarizing others' work (did not plagiarize, and did plagiarize) and students' awareness of academic conduct. Table 4.53 presents the one-way ANOVA, calculated to compare the scores relating the two groups of respondents. A statistically significant F ratio emerged between the groups, $F = 40.280$, $p < 0.01$. This means that the two groups responded differently, and this was not due to chance.

Table 4.53

ANOVA: Awareness of Academic Conduct

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.003	1	9.003	40.280	.000
Within Groups	211.226	945	.224		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(b)

Using Other Students Materials with Acknowledging Credit

The statistics in Table 4.54 summarizes the data gathered from 947 valid responses. Item 9(c) is the source of the findings. Approximately 91% ($n = 858$) of the respondents indicate they did not use other students materials without their knowledge. On the contrary, 9% ($n = 89$) reportedly using other students' materials without their knowledge. The high mean (mean = 2.90) symbolizes positive conduct.

Table 4.54

Descriptives: Awareness of Academic Conduct based On Using Other Students' Materials

No. of Times of Dishonesty	N	M	SD	SE	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did not use other students' materials	858	2.90	.47	.02	2.87	2.93
Did use other students' materials	89	2.58	.48	.05	2.48	2.68
Total	947	2.87	.48	.02	2.84	2.90

A one-way ANOVA was used to compare students' responses to using other students' materials (did not use other students' materials, and did use other students' materials) and

students' awareness of academic conduct The results of the one-way ANOVA statistics are shown in Table 4.55. A statistically significant F ratio was found between the groups evaluated, $F = 36.451$, $p < 0.01$. Hence, the groups answered differently, and the results were not due to chance.

Table 4.55

ANOVA: Awareness of Academic Conduct Based on Using Other Students' Materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.179	1	8.179	36.451	.000
Within Groups	212.050	945	.224		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(c)

Copy/Paste Material Into Own Papers

Table 4.56 consists of the statistics on the responses obtained from 947 respondents. They provided answers to item 9(d) in terms of whether or not they did copy and paste Internet materials into their assignments. Approximately 59% ($n = 562$) reported that they did not engage this activity. On the contrary, approximately 41% ($n = 385$) admitted they did copy and paste materials from the Internet into their assignments.

Table 4.56

Descriptives: Awareness of Academic Conduct based on Students' Copying and Pasting Materials

No. of Times of Dishonesty	N	M	SD	SE	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did not copy and paste material	562	2.95	.48	.02	2.91	2.99
Did copy and paste material	385	2.75	.46	.02	2.71	2.8
Total	947	2.87	.48	.02	2.84	2.90

The mean for those who stated they did not copy and paste (2.95) was approximately 7.5% higher than the mean (2.75) of respondents who confirmed this act of dishonesty. The higher mean shows a greater awareness of academic conduct among those who did not participate in the copy and paste phenomenon.

The results of the calculations for the one-way ANOVA are shown in Table 4.57. The purpose of the test was to assess whether there are differences between the groups. The results show a significant F ratio exist between the groups, $F = 39.647$, $p < 0.01$. It may be inferred that the differences were not due to chance.

Table 4.57

ANOVA: Awareness of Academic Conduct based on Students' Copying and Pasting Materials

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.868	1	8.868	39.647	.000
Within Groups	211.361	945	.224		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(d)

Actions Taken Contrary to Faculty Instruction

The statistics presented in Table 4.58 were based on 947 valid responses on item 9(e) where respondents indicated whether or not they did get help from other students contrary to instruction from faculty. Overall, 73% ($n = 687$) of the respondents stated that they did not act contrary to instruction. However, 27% ($n = 260$) did act contrary to instruction from faculty.

Table 4.58

Descriptives: Actions Taken by Students Contrary to Faculty Instruction

No. of Times of Dishonesty	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did not act contrary to instruction	687	2.95	.47	.02	2.92	2.99
Did act contrary to instruction	260	2.66	.46	.03	2.60	2.71
Total	947	2.87	.48	.02	2.84	2.90

The mean of respondents who acted in conformity with faculty instructions was 2.95 and was higher than for respondents whose action was inimical to positive conduct (mean = 2.66). This suggests that the mean of positive behavior, that is, greater awareness, was approximately 11% higher (i.e., difference between the means of the two groups) than the mean of respondents who did follow instructions.

The computations provided in Table 4.59 are the results of the one-way ANOVA. A one-way ANOVA was used to compare students' responses to faculty instruction (did not act contrary to faculty instruction, and did act contrary) and students' awareness of academic conduct. This test was used to determine significance of the groups, and whether the results were due to chance. The results show a significant *F* ratio between the groups, $F = 75.500$, $p < 0.01$. The outcome was influenced by the majority of students (73%, $n = 687$) who acted favorably to faculty instruction. Therefore, the differences were not due to chance.

Table 4.59

ANOVA: Awareness of Academic Conduct based on Students' Action Contrary to Faculty Instruction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.293	1	16.293	75.500	.000
Within Groups	203.936	945	.216		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(e)

Non-Involvement in any Form of Academic Misconduct

Table 4.60 consists of the statistics on the responses obtained from 947 respondents. They were asked to provide responses to involvement in academic misconduct (Item 9f). Approximately 54% ($n = 507$) reported they did engage in various forms of academic misconduct. On the contrary, about 46% ($n = 440$) stated they did not engage in academic misconduct. Further analysis shows that the mean of respondents (3.03) who were not involved in any academic dishonesty had a higher mean than those were involved for which the mean was 2.73. A high mean suggests that people are honest while a lower average represents academic dishonesty.

Table 4.60

Descriptives: Non-Involvement of Students in Any Form of Academic Misconduct

No. of Times of Dishonesty	N	M	SD	SE	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Did involve in academic misconduct	507	2.73	.46	.02	2.69	2.77
Did not involve in academic misconduct	440	3.04	.45	.02	2.99	3.08
Total	947	2.87	.48	.02	2.84	2.90

A one-way ANOVA was used to compare students' responses to involvement in academic dishonesty (did involve or did not involve) and students' awareness of academic conduct. The one-way ANOVA results are presented in Table 4.61. A statistically significant F ratio was found between the groups, $F = 108.383$, $p < 0.01$. Therefore, the differences were not due to chance.

Table 4.61

ANOVA: Awareness of Academic Conduct in Non-Involvement of Students in Any Form of Academic Misconduct

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.660	1	22.660	108.383	.000
Within Groups	197.569	945	.209		
Total	220.229	946			

Note: ONEWAY Awareness of academic conduct by Item 9(f)

Awareness of Conduct Based on Students' Class Standing

This section examines the extent to which academic awareness relates to class standing (i.e., freshmen, sophomores, juniors, and seniors). This information is reported in Table 4.62. The statistics are based on 995 valid responses. About 31% ($n = 308$) of respondents are freshmen, 25% ($n = 253$) are sophomores, 23% ($n = 225$) are juniors, and 21% ($n = 209$) are seniors. The highest level of awareness was among freshmen with mean of 2.92 while the least level of awareness was for sophomores at 2.85. However, very little differences in the means were found among the class standings as depicted in Table 4.62.

Table 4.62

Descriptives: Awareness of Conduct based on Students' Class Standing

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Freshman	308	2.93	.49	.03	2.87	2.98
Sophomore	253	2.85	.50	.03	2.79	2.92
Junior	225	2.86	.47	.03	2.80	2.92
Senior	209	2.86	.45	.03	2.80	2.92
Total	995	2.88	.48	.01	2.85	2.91

Table 4.63 represents the details of one-way ANOVA that was run to evaluate differences in students' awareness of conduct and students' class standing. The results in the table show an *F* ratio of 1.376, and $p = 0.249$, which shows that the differences of awareness by class standing were not statistically significant.

Table 4.63

ANOVA: Awareness of Academic Conduct based on Students' Class Standing

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	.947	3	.316	1.376	.249
Within Groups	227.429	991	.229		
Total	228.376	994			

Influence of Students' GPA on Academic Awareness

In Table 4.64 participants were asked to indicate their GPA (Item 35), which was compared with academic awareness. Overall, students with GPA of 1.99 and less accounted for about 5% ($n = 47$); 13% ($n = 127$) with a GPA of 2.00–2.49; 26% ($n = 249$) with a GPA of 2.50–2.99; 33% ($n = 314$) with a GPA of 3.00–3.49; and 23% ($n = 222$) with a GPA of 3.50 – 4.00. The highest mean (mean = 2.95) was found in the group with the highest GPA (3.50-4.00) while the lowest mean (mean = 2.82) was in the group with the next lowest GPA (2.00-2.49).

Table 4.64

Descriptives: Influence of Students' GPA on Academic Awareness

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
1.99 or less	47	2.86	.47	.07	2.73	3.00
2.00 – 2.49	127	2.82	.48	.04	2.73	2.90
2.50 – 2.99	249	2.85	.46	.03	2.79	2.91
3.00 – 3.49	314	2.86	.51	.03	2.80	2.92
3.50 – 4.00	222	2.95	.46	.03	2.89	3.01
Total	959	2.87	.48	.01	2.84	2.90

Table 4.65 provides details of the one-way ANOVA run to evaluate the influence of GPAs on academic awareness by GPA group. The results in the table show an *F* ratio of 2.219, and $p = 0.065$ which is not statistically significant. It appears GPA have no impact on students' awareness of academic conduct.

Table 4.65

ANOVA: Awareness of Academic Conduct based on Students' GPA

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Between Groups	2.038	4	.510	2.219	.065
Within Groups	219.047	954	.230		
Total	221.085	958			

Influence of Self-Esteem and Academic Dishonesty

To gain a better understanding on the relationship between self-esteem and students' academic conduct an assessment was done to relate self-esteem with students' awareness of academic conduct, perception of academic conduct, character traits, honor code, and religion. This was assessed using Pearson correlation coefficient by pairing self-esteem with each of the five variables identified above.

Participants were asked to respond to 16 items designed to assess their self esteem and relationship with academic dishonesty. Of the 16 items, six were reversed coded (r50, r56, r58, r60, r61, and r62) to account for a positive response to a negative item. Likert type responses are covered by Items 47 through 62. The range of response was from strongly agree (4) to strongly disagree (1). The output was presented in Table 4.66, which showed the means and standard deviations for self-esteem and five other variables. A high mean closer to 4.00 is considered agreement of self-esteem items relative to academic dishonesty while a mean score of 1.00 is considered as disagreeing to items of self-esteem. Hence, the mean of 1.77 for self esteem was considered falling between the continuums, disagree and strongly disagree. The finding suggests self-esteem is considered a less a factor when trying to relate its influence on academic dishonesty.

Table 4.66

Simple Statistics based on conduct scales

Variable	N	M	SD	Sum	Min.	Max.
Awareness of Academic Conduct	975	2.93	0.41	2,857	1.50	4.00
Perception of Academic Conduct	976	3.34	0.56	3,266	1.33	4.00
Character Traits	974	2.93	0.50	2,862	1.00	4.00
Honor Code	968	2.72	0.67	2,634	1.00	4.00
Religion	953	3.27	0.71	3,119	1.00	4.00
Self-Esteem	956	1.77	0.35	1,696	1.00	3.06

In Table 4.67, self-esteem was further assessed to determine its relationship with students' awareness of academic conduct, perception of academic conduct, character traits, honor code, and religion. Pearson's correlations were calculated using each of these pairs: self-esteem with students' awareness of academic conduct; perception of academic conduct; character traits; honor code; and religion. Each variable paired with

self-esteem showed negative correlation is significant at $p < .01$. The largest negative correlation of -0.41 was found between self esteem and character traits, significant at $p < .01$. Self-esteem and students' awareness of academic conduct had a moderately weak negative correlation of - 0.40, . The negative correlation although somewhat low indicated that self esteem and character traits, as two variables, increased and decreased in opposite direction-. The same was true for self-esteem and students' awareness of academic conduct.

An r value of - .41 suggests a relationship, although, not a strong one, nevertheless, that as self esteem and other variables trend upward the students' awareness of academic conduct decreases. However, with these moderately low r -values caution should be exercised as their r -squared values (0.16) provide little explanation (i.e., 16%) of the variability in students' conduct relative to self-esteem.

Table 4.67

Pearson Correlation Coefficients

Variable	Awareness of Academic Conduct	Perception of Academic Conduct	Character Traits	Honor Code	Religion	Self- Esteem
Self- Esteem	-0.40 < .0001 956	-0.37 < .0001 956	-0.40 < .0001 956	-0.20 < .0001 950	-0.21 < .0001 944	1.00 956

In conclusion it appears that academic dishonesty is only somewhat influenced by self-esteem. The negative correlations should not be discounted particularly as there were significant relationships between each variable pair with self-esteem. Nonetheless, only 4% - 16% of the variability (the r -squared values) in each of the five variables could explain the influence of self-esteem.

Supplementary Question 1

In relation to an honor code, is there a difference in students' academic conduct between those who attend AACSB accredited schools compared with students who attend non-AACSB schools?

Business schools accorded the AACSB accreditation must demonstrate that the business programs meet the highest quality and that these be subject to continuous improvements (AACSB, 2006, p. 2). For this study, institutions that do not have this accreditation are referred to as non-AACSB.

The principal purpose of this evaluation was to assess if students of AACSB institutions responded more favorably to positive academic conduct (since these institutions have honor codes) than non-AACSB students. Students were not asked to indicate if their business programs were AACSB and non-AACSB accredited. The researcher identified the school type based on the name of the participating education institution. Table 4.68 is based on 1,007 valid respondents. AACSB designations in the study account for 18% ($n = 186$) while non-AACSB designations account for 82% ($n = 821$).

Table 4.68

Group Statistics: Influence of Honor Code on AACSB and non-AACSB accreditations

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
Non-AACSB	821	2.74	.67	.02
AACSB	186	2.62	.69	.05

The means for academic conduct relative to AACSB and non-AACSB institutions were 2.62 and 2.74 respectively. The honor code t-scores were different for both groups these were not found to be statistically significant ($t(1005) = 2.326, p > 0.01$). Levene's test was used to evaluate the equality or similarity of the variance (See Table 4.69). This test gave an F -ratio of 0.041 with a significance level of 0.839, which far exceeds the critical level of 0.01 (Sprinthall, 2009). The conclusion was that the honor code system did not significantly influence academic dishonesty. There is no difference in students' academic conduct between those who attend AACSB accredited institutions compared with students who attend non-AACSB institutions.

Table 4.69

Independent Samples Test: Honor Code on AACSB and non-AACSB accreditations

	Levene's Test for Equality of Variances		<i>t</i>-test for Equality of Means	
	<i>F</i>	Sig.	<i>t</i>	<i>Df</i>
Equal variances assumed	.041	.839	2.160	1005
Equal variances not assumed			2.110	268.282

Supplementary Question 2

Is there a difference in academic conduct between male and female business students?

The sections that follow discusses gender with respect to (a) cheating on tests, (b) plagiarism, (c) unauthorized use of other students' materials, (d) copy/paste phenomena,

(e) response to faculty instruction, and (f) non-involvement in academic dishonesty. Each of these variables will be discussed separately.

Cheating on Tests: Gender Differences

Table 4.70 contains responses to items 9a and 33. Respondents were asked to indicate whether or not they did cheat on tests (Item 9a) and gender (Item 33). Overall, 38% ($n = 356$) of the participants are males, and 62% are females. About 88% ($n = 824$) reported they did not cheat on tests. Of the 12% ($n = 116$) who indicated they did cheat on tests, 59% ($n = 69$) were males while 41% ($n = 47$) are females. This suggests that of cheaters, male students account for a higher percentage than do females.

Table 4.70

Cross Tabulation of Students' Responses to Cheating on Tests, Gender Differences, and Frequencies

Students' response	Male	%	Female	%	Total
No cheating on tests	287	30.5	537	57.1	824
Cheating on tests	69	7.3	47	5.0	116
Total	356		584		940

A chi-square test was performed, results presented in Table 4.71, to assess if there was a significant relationship between gender (male and female) and students' responses to cheating on tests. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 26.265, p < 0.01$). The results were influenced by the fact that there was a higher percentage of male cheaters (53%, $n = 69$) among those who indicated they cheated on tests. It can be concluded there is significant relationship between gender and cheating on tests. Further, the null hypothesis should be rejected.

Table 4.71

Expected Counts, Count, and Chi-Square Analysis based On Cheating on Tests and Gender Differences

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	26.265 ^a	1	.000		
Continuity Correction ^b	25.228	1	.000		
Likelihood Ratio	25.398	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	26.237	1	.000		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 43.93.

^b Computed only for a 2x2 table

Plagiarism: Gender Differences

Table 4.72 contains responses to items 9b and 33. Respondents were asked to indicate whether or not they plagiarized other peoples' work (Item 9b) and to state their gender (Item 33). Overall, 38% ($n = 356$) of the participants are males, and 62% are females. About 88% ($n = 828$) reported they did not plagiarize other people's work. The other 12% ($n = 112$) indicated they did plagiarize other peoples' work. Of this group, 42% ($n = 48$) admitting plagiarism are males while 58% ($n = 58$) are females.

Table 4.72

Cross Tabulation of Students' Responses to Plagiarism, Gender Differences, and Frequencies

Students' response	Gender		Total
	Male	Female	
Did not engage in Plagiarism	308	520	828
Did engage in Plagiarism	48	64	112
Total	356	584	940

The chi-square tests are presented in Table 4.73 and were used to evaluate the the relationships between gender (male and female) and students' responses to engaging in plagiarism. The relationships were not statistically significant at the critical alpha level ($\chi^2 = 1.343, p = 0.247$). It can be concluded there is no significant relationship between gender (male and female) and engaging in plagiarism. Therefore the null hypothesis should be accepted.

Table 4.73

Expected Counts, Count, and Chi-Square Analysis based on Plagiarism and Gender Differences

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.343 ^a	1	.247		
Continuity Correction ^b	1.113	1	.291		
Likelihood Ratio	1.325	1	.250		
Fisher's Exact Test				.255	.146
Linear-by-Linear Association	1.341	1	.247		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 42.42.

^b Computed only for a 2x2 table

Unauthorized Use of Other Students' Materials: Gender Differences

Table 4.74 contains responses to items 9c and 33. Respondents were asked to indicate whether or not they did use other students' materials without acknowledging credit (Item 9a) and their gender (Item 33) Overall, 38% ($n = 356$) of the participants are males, and 62% are females. About 91% ($n = 851$) reported they did not use other students' materials. Nine percent ($n = 89$) confirmed they did. Of this group, 55% ($n = 49$) are males while 45% ($n = 40$) are females. Of those who used the materials of others, a higher percentage was males compared to females.

Table 4.74

Cross Tabulation of Students' Responses to Use of Materials, Gender Differences, Frequencies

Students' response	Gender		Total
	Male	Female	
No unauthorized material usage	307	544	851
Unauthorized material usage	49	40	89
Total	356	584	940

A chi-square test was computed to assess if there was a significant relationship between gender (male and female) and students' responses to unauthorized use of other students' materials. These results are contained in Table 4.75. The chi-square statistic was significant at the critical level ($\chi^2 = 12.337$, $p < 0.01$). There is significant relationship between gender (male and female) and unauthorized use of other students' materials. Furthermore, the null hypothesis should be rejected.

Table 4.75

Expected Counts, Count, and Chi-Square Analysis based On Unauthorized Materials Usage and Gender

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.337 ^a	1	.000		
Continuity Correction ^b	11.544	1	.001		
Likelihood Ratio	11.938	1	.001		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	12.324	1	.000		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 42.42.

^b Computed only for a 2x2 table

Copy/Paste from the Internet: Gender Differences

Table 4.76 contains responses to items 9d and 33. Respondents were asked to indicate whether or not they did copy and paste Internet materials into their own assignments/papers (Item 9d) and gender (Item 33). Overall, 38% ($n = 356$) of the participants are males, and 62% are females. About 59% ($n = 557$) reported they did not copy and paste Internet materials into assignments and papers. Forty-one percent ($n = 383$) confirmed they did. Of this group, 39% ($n = 151$) are males while 61% ($n = 232$) are females. Overall a lower percentage of females (40%, $n = 232$) engaged in copying and pasting from the Internet than male students (42%, $n = 151$).

Table 4.76

Cross Tabulation of Students' Responses to Copy and Paste, Gender Differences, and Frequencies

Students' response	Gender		Total
	Male	Female	
Did not copy and paste from Internet	205	352	557
Did copy and paste from Internet	151	232	383
Total	356	584	940

Chi-square tests were used to evaluate the relationships between gender (male and female) and students' responses to copy and paste from the Internet (without citation) were assessed to ascertain the differences between the groups. These results are reported in Table 4.77. The chi-square statistic was not significant at the critical level ($\chi^2 = 0.663$, $p = 0.416$). It can be concluded there is no significant relationship between gender (male and female) and students' copy and paste from the Internet. Hence the null hypothesis can be accepted.

Table 4.77

Expected Counts, Count, and Chi-Square Analysis based On Internet Copy and Paste Actions and Gender Differences

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.663 ^a	1	.416		
Continuity Correction ^b	.556	1	.456		
Likelihood Ratio	.662	1	.416		
Fisher's Exact Test				.452	.228
Linear-by-Linear Association	.662	1	.416		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 145.05.

^b Computed only for a 2x2 table

Actions Contrary to Faculty Instruction: Gender Differences

Table 4.78 provides the count of gender identification (item 33) and students' responses to faculty instructions (item 9e). About 38% ($n = 356$) of the participants were males and 62% ($n = 584$) were females. Approximately 73% ($n = 682$) confirmed they did not act contrary to faculty instructions while the other 27% stated that they did. Of this group, 47% ($n = 121$) are males while 53% ($n = 137$) are females. The overall ratio of male to female produced a slightly different interpretation when evaluating the results in terms those acting contrary to instruction. About 34% ($n = 121$) of males acted contrary to instruction while 23% ($n = 137$) of females acted contrary to instruction. Therefore, this suggests female students were in greater compliance than do males.

Table 4.78

Cross Tabulation of Students' Response to Actions Taken Contrary to Faculty Instruction, Gender, and Frequencies

Actions	Gender		Total
	Male	Female	
Did not act contrary to instruction	235	447	682
Did act contrary to instruction	121	137	258
Total	356	584	940

A chi-square test was performed to assess if there was a significant relationship between gender (male and female) and students' responses to faculty instruction. The results are presented in Table 4.79. The chi-square statistic was significant at the critical level ($\chi^2 = 12.315$, $p < 0.01$). It can be concluded there is statistical relationship between gender (male and female) and students' responses to faculty instruction. Therefore, the null hypothesis should be rejected.

Table 4.79

Expected Count, Count, and Chi-Square Analysis based on Actions Contrary to Faculty Instruction and Gender Differences

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.315 ^a	1	.000		
Continuity Correction ^b	11.792	1	.001		
Likelihood Ratio	12.140	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	12.302	1	.000		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 97.71.

^b Computed only for a 2x2 table

Non-Involvement in Academic Misconduct: Gender Differences

Table 4.80 contains responses to indicate whether or not students had been involved in any form of academic misconduct in the last two years (Item 9e) and their gender (Item 33). Overall, 38% ($n = 356$) of the participants are males, and 62% are females. About 46% ($n = 435$) reported they were not involved in any form of academic misconduct. Fifty-four percent ($n = 505$) confirmed they were. Of this group, 42% ($n = 215$) are males while 58% ($n = 290$) are females. Fewer male students (60%) reported involvement in academic dishonesty than female students (49%).

Table 4.80

Cross Tabulation of Students' Responses to Non-Involvement in Academic Misconduct, Gender, and Frequencies

Students' response	Gender		Total
	Male	Female	
Involvement in academic misconduct	215	290	505
Non-involvement in academic misconduct	141	294	435
Total	356	584	940

The chi-square tests are presented in Table 4.81 and were used to evaluate the relationships between gender (male and female) and students' responses to involvement in academic misconduct. The relationships were statistically significant ($\chi^2 = 10.254$, $p < 0.01$). Therefore, the null hypothesis can be rejected.

Table 4.81

Expected Counts, Count, and Chi-Square Analysis based on Non-Involvement in Academic Misconduct and Gender Differences

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.254 ^a	1	.001		
Continuity Correction ^b	9.826	1	.002		
Likelihood Ratio	10.305	1	.001		
Fisher's Exact Test				.002	.001
Linear-by-Linear Association	10.243	1	.001		
N of Valid Cases	940				

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 164.74.

^b Computed only for a 2x2 table

Supplementary Question 3

Is there a difference in academic conduct between younger students (under 32 years) and older students (32 years and older)?

Although this research question addresses two broad age categories, the actual discussions further break down younger students (under 32 years) into three sub-categories (i.e., 18-22, 23-27, and 28-32) to gain a better understanding of the role that age plays in academic dishonesty. Cross-tabulations were done to determine how students' age influences academic conduct (i.e., cheating on tests, plagiarizing other peoples' work, using other students' materials, copy and paste from Internet, actions contrary to faculty instruction, non-involvement in academic misconduct) and students' GPA. The ultimate goal is to note any differences between younger and older students.

Cheating on Tests: Students' Age

In Table 4.82 approximately 54% ($n = 510$) of respondents stated that they are in the range of 18–22 years, 19% ($n = 179$) in the range of 23–27; 9% ($n = 85$) in the range of 28–32, and 18% ($n = 166$) in the 33 + age group. In response to cheating, 88% ($n = 824$) of the respondents declared they did not cheat on tests while 12% indicated they did. Of this group, about 69% ($n = 80$) were in the 18–22 years age range; 26% ($n = 30$) in the 23–27 years age range; 2% ($n = 2$) in the 28–32 years age range; and 3% ($n = 4$) in the 33+ years age group. The most students cheating came from the 18–22 age range (69%) while the lowest frequency of cheating was from 28–32 age range (2%).

Table 4.82

Cross Tabulation of Students' Responses to Cheating on Tests, Students' Age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
No Cheating on tests	430	149	83	162	824
Did cheat on tests	80	30	2	4	116
Total	510	179	85	166	940

A chi-square test was performed to assess if there was a significant relationship between students' age (18-22, 23-27, 28-32, and 33+ years) and students' responses to cheating on tests. The results are presented in Table 4.83. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 31.481$, $p < 0.01$). It can be concluded there is a relationship between age (i.e., 18-22, 23-27, 28-32, and 33+ years) and students' cheating on tests. , there was more students cheating among the 18-22 years students than other groups. The null hypothesis should be accepted.

Table 4.83

Expected Counts, Count, and Chi-Square Analysis based on Students' Cheating, Cheating on Tests, and Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.481 ^a	3	.000
Likelihood Ratio	40.854	3	.000
Linear-by-Linear Association	25.306	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.49.

Plagiarize Other Peoples' Work: Students' Age

Respondents were asked to indicate whether they did plagiarize other peoples' work (item 9b), and to state their age (item 32) (Table 4.84). About 54% ($n = 510$) of respondents are in 18 – 22 year age range, 19% ($n = 179$) in the 23–27, 9% ($n = 85$) in the 28–32, and 18% ($n = 166$) in the 33+ age group. Approximately 88% ($n = 828$) of the respondents reported they did not plagiarize other peoples' work. The remaining 12% stated they did plagiarize. Of this group, 75% ($n = 84$) are in the 18–22 years age range; 19% ($n = 21$) in the 23–27 age range; 2% ($n = 2$) in the 28–32 age range, and 4% ($n = 5$) in the 33+ age group. Cumulatively, 96% ($n = 107$) of the students who reported plagiarizing are in the three ranges from 18 – 32 years (younger students) compared with 4% ($n = 5$) in the 33+ age group.

Table 4.84

Cross Tabulation of Students' Responses to Plagiarizing Other Peoples' Work, Students' age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
Did not plagiarize	426	158	83	161	828
Did plagiarize	84	21	2	5	112
Total	510	179	85	166	940

The chi-square tests are presented in Table 4.85 and were used to assess the relationships between students' age (i.e., 18-22, 23-27, 28-32, and 33+ years) and students' response to plagiarism. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 30.032$, $p < 0.01$). However, plagiarism was more frequent in the 18-22 years students than the other groups. It can be concluded there is significant relationship between students' age and plagiarizing other peoples' work.

Table 4.85

Expected Count, Count, and Chi-Square Analysis based on Students' Plagiarizing Other Peoples' Work and Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.032 ^a	3	.000
Likelihood Ratio	37.027	3	.000
Linear-by-Linear Association	28.263	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.13.

Using Other Students Materials without Acknowledging Credit: Student' Age

Table 4.86 represents the extent to which students use other students' materials without acknowledging credit and responses to age (9c). Overall, 54% ($n = 510$) of respondents reported they are in the 18-22 years age range, 19% ($n = 179$) in the 23-27 age range, 9% ($n = 85$) in the 28–32 age range, and 18% ($n = 166$) in the 33+ age group.

Approximately 91% ($n = 851$) of respondents noted they did not use other students' materials without acknowledging credit while 9% ($n = 89$) confirmed they did. Of this group, about 70% ($n = 63$) are in the 18-22 years range, 18% ($n = 16$) in the 23–27 range, 6% ($n = 5$) in the 28-32 range, and 6% ($n = 5$) in the 33+ age range.

Table 4.86

Cross Tabulation of Students' Responses to Use of Other Students' Materials, Students' age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
Did not use other students' materials	447	163	80	161	851
Did use other students' materials	63	16	5	5	89
Total	510	179	85	166	940

A chi-square test presented in Table 4.87 was performed to assess if there was a significant relationship between students' age and responses to using other students' materials. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 14.357$, $p < 0.01$). The findings indicate there is statistical relationship between students' age (i.e., 18-22, 23-27, 28-32, and 33+years) and use of other students' materials. However, use of other students' materials was most frequent among the 18-22 years group.

Table 4.87

Expected Counts, Count, and Chi-Square Analysis based On Use of Other Students' Materials and Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.357 ^a	3	.002
Likelihood Ratio	16.803	3	.001
Linear-by-Linear Association	14.325	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.05.

Copy/Paste Internet Materials Into Own Papers: Student' Age

Table 4.88 represents Item 9d assessing students' responses to the extent to which they copy and paste Internet materials into their own work/papers (9d) and their age (Item 32). Overall, 54% ($n = 510$) of respondents reported they are in the 18–22 years age range, 19% ($n = 179$) in the 23–27 age range, 9% ($n = 85$) in the 28–32 age range, and 18% ($n = 166$) in the 33+ age group.

Approximately 59% ($n = 851$) of respondents noted they did not copy and paste Internet materials into their work/papers while 41% confirmed they did. Of this group, about 65% ($n = 249$) are in the 18–22 years range, 21% ($n = 81$) in the 23–27 range, 5% ($n = 21$) in the 28–32 age range, and 9% ($n = 32$) in the 33+ age range. The highest number of participants admitting to copying and pasting of Internet materials came from the 18–22 years age range.

Table 4.88

Cross Tabulation of Students' Responses to Copy and Paste Internet Materials Into Own Paper, Students' Age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
Did not copy/paste into own paper	261	98	64	134	557
Did copy/paste into own paper	249	81	21	32	383
Total	510	179	85	166	940

The chi-square tests presented in Table 4.89 were used to evaluate the relationships between students' age and students' responses to copy and paste of Internet materials into their own papers (without citation). The chi-square statistic was significant at the critical alpha level ($\chi^2 = 56.036, p < 0.01$). On this basis it can be concluded there is

significant relationship between students' age and copying and pasting from the Internet into students' own paper (without citation). However, there was higher levels?? of copy and paste among 18-22 years old than other groups.

Table 4.89

Expected Count, Count, and Chi-Square Analysis based on Use of Internet Copy/Paste and Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.036 ^a	3	.000
Likelihood Ratio	59.669	3	.000
Linear-by-Linear Association	52.648	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.63.

Actions Taken Contrary to Faculty Instruction: Student' Age

Table 4.90 represents Item 9e, which assesses students' responses to faculty instructions and their ages (item 9e). Overall, 54% ($n = 510$) of respondents reported they are in the 18–22 years age range, 19% ($n = 179$) in the 23–27 range, 9% ($n = 85$) in the 28–32 range, and 18% ($n = 166$) in the 33+ age group.

Approximately 73% ($n = 682$) of respondents noted they did not act contrary to faculty instructions while 27% did. Of this group, about 70% ($n = 182$) are in the 18-22 years age range, 18% ($n = 47$) in the 23-27 age range, 4% ($n = 11$) in the 28-32 age range, and 8% ($n = 18$) in the 33+ age range. The highest level of participants taking action contrary to faculty instructions evolved was the 18–22 years age range.

Table 4.90

Cross Tabulation of Students' Responses to Actions Taken Contrary to Faculty Instruction, Students' Age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
Did not act contrary to faculty instruction	328	132	74	148	682
Did act contrary to faculty instruction	182	47	11	18	258
Total	510	179	85	166	940

The chi-square test was performed to assess if there was a significant relationship between students' age (i.e., 18-22, 23-27, 28-32, and 33+ years) and students responses to action taken contrary to faculty instruction. The results are presented in Table 4.91. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 49.476$, $p < 0.01$). Therefore, it can be concluded there is statistical relationship between students' age and their response to faculty instruction. However, there were more students in the 18-22 age group than for other groups.

Table 4.91

Expected Count, Count, and Chi-Square Analysis based On Students' Actions Contrary to Faculty Instruction, and Students' Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	49.476 ^a	3	.000
Likelihood Ratio	54.605	3	.000
Linear-by-Linear Association	48.103	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.33.

Non-Involvement in Academic Misconduct: Students' Age

Table 4.92 assesses Item 9f, students' responses to involvement in academic misconduct and their age (item 32). Overall, 54% ($n = 510$) of respondents reported being in the 18–22 years age range, 19% ($n = 179$) in the 23–27 range, 9% ($n = 85$) in the 28–32 range, and 18% ($n = 166$) in the 33+ age group.

Approximately 46% ($n = 435$) of respondents noted they did not get involved in academic misconduct in the last two years while the remaining 54% ($n = 505$) confirmed they did. Of this group, about 66% ($n = 333$) are in the 18–22 years age range, 20% ($n = 100$) in the 23–27 range, 5% ($n = 26$) in the 28–32 range, and 9% ($n = 46$) in the 33+ age range. The highest number of respondents involved in academic misconduct is in the 18–22 years age group. In this study the data consistently show that the greatest vulnerability to academic misconduct is repeatedly found in the youngest age group (18–22 years).

Table 4.92

Cross Tabulation of Students' Responses to Non-Involvement in Academic Dishonesty, Age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
Involvement in academic dishonesty	333	100	26	46	505
Non-involvement in academic dishonesty	177	79	59	120	435
Total	510	179	85	166	940

A chi-square test was performed to ascertain if there was a significant relationship between students' age and students' involvement in academic dishonesty. The results are

contained in Table 4.93. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 91.274$, $p < 0.01$). Based on the findings it can be concluded there is significant relationship between students' age (i.e., 18-22, 23-27, 28-32, and 33+ years) and involvement in academic dishonesty. In addition, the null hypothesis can be rejected.

Table 4.93

Expected Count, Count, and Chi-Square analysis based on Non-Involvement in Academic Misconduct and Students' Age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	91.274 ^a	3	.000
Likelihood Ratio	93.076	3	.000
Linear-by-Linear Association	87.566	1	.000
N of Valid Cases	940		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.34.

Students' Age and GPA

Table 4.94 contains the responses to how age (item 32) affects GPA (item 35). The assessment was done to determine if older students have better GPAs than younger students. Because performance is measured by GPA, the higher the GPA, the better the students' performance. The table shows approximately 82% ($n = 784$) of the participants' GPAs fall within the combined range from 2.50 to 4.00 while the remaining 18% are in 1.99–2.49 range. In the 18–22 years age range, 55% ($n = 138$) attained GPA of 2.50–2.99, 52% ($n = 164$) attained 3.00–3.49, and 45% ($n = 100$) attained 3.50 – 4.00. Further analysis shows that in 2.50–2.99, the 18–32 age range represents about 90% ($n = 225$) of the GPA earned. Similarly in the GPA 3.00–3.49, this age group accounted for 80% while in the GPA bandwidth of 3.50 – 4.00 this age group accounted for 70% of the GPA earned. For older students (32 and older) they accounted for 8.5% – 30% of the GPA earned.

Table 4.94

Cross Tabulation of Students' Responses to GPA, Students' Age, and Frequencies

Students' response	Students' Age				Total
	18-22	23-27	28-32	33+	
1.99 and less	34	5	4	4	47
2.00 – 2.49	78	29	6	13	126
2.50 – 2.99	138	67	20	24	249
3.00 – 3.49	164	52	31	67	314
3.50 – 4.00	100	27	28	66	221
Total	514	180	89	174	957

The chi-square test was computed to evaluate whether there was a statistical relationship between students' age and students' GPA. Table 4.95 provides the results of the tests. The chi-square statistic was significant at the critical alpha level ($\chi^2 = 66.378$, $p < 0.01$). It can be concluded there is significant relationship between students' age and GPA. Hence, the null hypothesis should be rejected.

Table 4.95

Expected Counts, Count, and Chi-Square Analysis based on GPA and Age Differences

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.378 ^a	12	.000
Likelihood Ratio	67.169	12	.000
Linear-by-Linear Association	39.409	1	.000
N of Valid Cases	957		

^a 0 cells (.0%) have expected count less than 5. The minimum expected count is 4.37.

CHAPTER 5 – DISCUSSIONS

The main purposes of the study were to gain a better understanding of the relationship between students who complete a course of instruction in ethics, and the extent to which this could influence academic honesty. Other purposes included the need to determine why students cheat; the extent to which parents' background influences students' academic conduct; and the degree to which self-esteem could affect students' perception of academic honesty.

Beyond the 10 items from Rosenberg Self-Esteem Scale, the other 52 items were original, making up a total of 62 items. The instrument was divided into seven sections each designed to explore different phases of academic misconduct. Section One was designed to assess the students' attitude to academic dishonesty in college. Of the 14 items included in this section, 12 were based on a Likert-type responses (i.e., *strongly agree*, *agree*, *disagree*, and *strongly disagree*). Section Two was designed to assess cheating behaviors and how they would react if other students knew they were involved in academic dishonesty. This included four items all requiring Likert-type responses. Section Three was designed to evaluate students' character traits, and included six items all but one requiring Likert-type responses. Section Four designed to solicit responses about parents through the students' lens. The section included seven items with slightly less than 50% utilizing the Likert scale. Others required students to identify the most appropriate response. The main purpose of Section Five was to collect personal information about the students (e.g., age, GPA, academic standing). The section included

10 items with all except one requiring students to circle an appropriate response. Section Six was designed to explore the connections between academic dishonesty in college and professional behavior. Section Seven was designed to assess the students' self-esteem. All 16 items required Likert-type responses.

The questionnaires were distributed to undergraduate business students in nine universities, five of which were located in the state of Georgia, United States. Four universities were located in the Caribbean region. Valid responses of 1,017 represented 99% of questionnaires handed out to students by survey coordinators at each of the nine universities/colleges. Students completed the questionnaires in classes and placed them in the boxes designated. In terms of gender, there were almost twice as many females as there were male students.

Summary of Findings

The purpose of Research Question 1 was to determine whether students who did complete a course in ethics instructions were less susceptible to academic dishonesty than those who did not take it. The findings show that about 50% ($n = 499$) of the participants indicated that they did complete an ethics course. Interestingly, of this number, approximately 41% (206) admitted to academic misconduct while 59% (293) who did take a course stated that they did not engage in academic misconduct. Of those who reported that they did not take a course in ethics, that is, 50% ($n = 494$), approximately 61% ($n = 302$) stated they did not engage in any form of academic misconduct. The remaining 39% ($n = 192$) admitted culpability. In terms of academic standing, freshmen accounted for 31% ($n = 293$), 25% ($n = 239$) sophomores, 23% ($n = 216$) juniors, and 21% ($n = 197$) seniors. Overall, there was a higher percentage (61%, $n = 302$) of

academic honesty among students who did not take an ethics course than those who did (59%, $n = 293$).

The findings were compared to responses to two other items from the questionnaire. Item 23 asked if students had ever been dishonest while item 24 asked respondents for the number of times dishonesty had occurred. The percentage of students who did not complete an ethics course (61%, $n = 302$) was slightly greater than students who reported they did and had not been dishonest (58%, $n = 290$). It may be inferred that the students' principles of right and wrong could have a greater impact than pursuing an ethics course. Overall, the role that ethics instruction plays suggests there may be no direct bearing on academic dishonesty particularly since the relationships were not statistically significant was found. Reid, Taylor and Petocz (2011) questioned whether ethics instruction made any difference to students' behavior. They concluded, "we can't teach business students to be ethical....." (p. 11).

Research Question 2 examined the association of students' awareness of academic conduct with the prevalence of academic dishonesty. Approximately 60% ($n = 602$) of students did indicate non-awareness of academic conduct. In relation to the two groups, students being aware of academic conduct, and those not being aware, and the prevalence of academic dishonesty, there was statistical relationship between the groups. There was no available prior study to corroborate this finding.

Research Question 3 assessed the main reasons for students' involvement in academic dishonesty. Although 53% ($n = 516$) of the students declared that they have never been dishonest, approximately 47% ($n = 455$) provided various reasons for having engaged in dishonesty. Of those who admitted dishonesty (47%), the most pervasive

reasons given for academic misconduct was *to avoid failing the course* (27%, $n = 262$). Other reasons include to get a higher grade (17%, $n = 168$), to retain financial awards (2%, $n = 16$), and to keep up with the rest of the class (2%, $n = 9$). Implicit in the reasons given as to why students cheat is , cumulatively, approximately 44% ($n = 430$) are stating that they did cheat because of the need to get a better grade.

Apart from the new information about the need to retain financial awards, the findings are consistent with Dannells (1997) and Pavela and McCabe (1993). Both researchers concluded that the main reasons students engaged in academic dishonesty were to get a better grade and to improve students' chances of getting into graduate schools. However, for this new study on academic dishonesty, the main reasons are to avoid failing the course and to get a higher grades.

The purpose of Research Question 4 was to evaluate the correlation between the variables, *character traits* and student' perception of academic conduct, and *honor code* and students' perception of academic conduct. The results show that both character traits and honor code have some influence on academic misconduct. However, since honor code has low reliability, caution should be exercised when interpreting associated results from this variable. Notwithstanding, the r-value of 0.378 for honor code at best may be described as moderate yet, significant at less than 0.01. The r-value for character traits was moderate high at 0.605. At least one researcher pointed to the importance of honor codes (Dannells, 1997, p. 6). It seems that if students take an honor code seriously this could have some influence on character traits, and by extension, on academic integrity.

For Research Question 5 the evaluation was completed to determine students' academic conduct in terms of parents' background. In this question, parents' background

was further subdivided, first, the distinction between mothers and fathers, and second, parents' background delineated into age, education, occupation/career, and parents' support provided to participants. To better understand the variables, several cross-tabulations were done for the purpose of assessing relationships among certain variables (e.g., mothers' age and students' cheating, fathers' age and students' cheating, parents' education with students' cheating, parents' occupation/career with student cheating, parents' support with students' cheating, mothers' and fathers' age with plagiarism).

In most instances parents' background (separated into mothers and fathers for purpose of discussions) does have a significant influence on students' academic integrity outcome. For example, students' response to Internet copy and paste was cross-tabulated to parents' support the chi-square statistic was significant at the critical alpha level. Similarly, in terms of the influence of parents' support on faculty instruction, there were statistical relationships between parents' support and response to faculty instruction. It appeared from the analysis that parents' age has a bearing on academic dishonesty. Likewise, mothers' and fathers' age were found to have statistical relationships with students' academic standing.

The purpose of Research Question 6 was to evaluate the relationship between self-esteem and students' academic conduct. This question concentrated on the awareness of academic conduct.

In item 9, students were asked to identify a series of misconduct in which they may have been involved in college. Some of these included cheating on tests, plagiarizing other peoples' work, using other students' materials without giving them credit for it,

copying and pasting Internet materials into school assignments, and obtaining help from other students contrary to faculty instructions. Cheating on tests was cross-tabulated with academic dishonesty. When a one-way ANOVA was used to compare students' responses to cheating on tests and their awareness to academic conduct, a significant F-ratio was found. The differences between those who cheat and those who did not cheat were not due to chance. Likewise, academic dishonesty was compared with plagiarizing others' work. A statistical relationship was found in this assessment. Similarly, a one way ANOVA was used to compare students' response to using other students' materials and students' awareness of academic conduct. Further evaluations were done to determine the influence of students' GPA on academic awareness. The statistic produced a statistically significant F ratio. Each of these actions was explored based on awareness of academic conduct. Grade Point Average (GPA) was used as the measure of performance. An important finding was that a high mean score symbolizes the awareness of favorable conduct. The conclusion is that a high self-esteem exemplifies favorable conduct, which translates into a high GPA. The opposite appears to be true. That is, low self-esteem can result in low performance. This finding is consistent with studies (Campbell & Lindsay, 1997; Daniel & King, 1997; Mecca, Smelser, & Casconcellos, 1989; Steininger, et al., 1964). However, for this study the overall finding suggest self esteem did not play a major role when determining its influence on academic dishonesty. Furthermore, when self-esteem was assessed and paired with students' awareness of academic conduct, perception of academic conduct, character traits, honor code and religion, for the most part, moderately weak negative correlations were found. Their r^2 -squared values were low that they provide little explanation of these variables. For example, the correlation

between self-esteem and character traits was -0.40 (i.e., $r = -0.40$). However, r^2 -square = 0.16 (coefficient of determine). This suggests 16% of the variance can be explained. Therefore, the other 84% is not be explained.

To determine in relation to the honor code if there is a difference between students who attend AACSB institutions and those who did not was the purpose of Supplementary Question 1. In this research it was determined that the honor code system did not significantly relate to academic honesty among students. This finding is somewhat contradictory at least to two studies (McCabe et al., & Nadelson) that indicated the benefits of institutionalizing the honor code system. McCabe and Pavela (2004) noted that institutions with an honor code system appeared to have a lower level of academic dishonesty than institutions without one (p. 12). Furthermore, Nadelson (2007, p. 2) asserts that the existence of an honor code made students feel more responsible and, therefore, there is less likelihood of cheating.

Supplementary Question 2 was used to evaluate the various perceptions in relation to gender differences. The sample consists of 62% ($n = 584$) female and 38% ($n = 356$) male. This question was delineated into several components so as to improve understanding of whether female students are more academically responsible than male students or vice versa. The constituent parts of this analysis included cheating on tests, plagiarism, unauthorized use of students' materials, copy/paste from the Internet, non-involvement in academic conduct, academic standing, grade point average, and program major. Of those who did cheat on tests, males were found to be more culpable (59%) than females (41%). In relation to plagiarism, males had 43% compared with females 57%. For unauthorized use of students' materials, males had 55% compared with females 45%.

In the copy/paste action male students had 39% in contrast to female students with 61%. In relation to acting contrary to faculty instructions, male students had 47% compared to female students who had a higher level of involvement at 53%. Respondents were asked to indicate if in the last two years of college they had been involved in academic misconduct. Male students reported a lower level of involvement at 43% compared with females with 57%. However, in an earlier study conducted by Tibbetts (1999), it was found that male students cheated more than female students. Similarly, he also indicated that “GPA differed significantly by gender” (p. 334). In terms of GPA, he contends that female students had a higher persistence on getting a higher GPA than male students and this affects females’ propensity to cheat.

Two conclusions can be inferred from the preceding paragraph. Of the six actions studied on academic dishonesty, male students who were dishonest in *cheating on tests* and *unauthorized use of other students’ materials* were a higher percentage than females who did. However, female students were more prevalent in *plagiarizing others’ work*, *copy and paste from the Internet* (without citation), *actions contrary to faculty instruction*, and *more involvement in academic misconduct* than males who indicated the same actions.

On the basis of the findings above it may be inferred that in relation to this specific research question, that gender plays a major role in academic misconduct for certain actions.

The findings outlined in the preceding paragraphs did for the most part relate to some of the earlier research findings. Anderson (1957, p. 586) asserted that female students cheat more than male. Those findings were similar to those reflected in

Graham's et al. study (1994) which stated that female students were more likely to cheat than males. However, Al-Qaisy (2008) noted that male students cheat more than females (p. 144). Other studies of gender that noted a higher inclination of male dominance in cheating include Aiken (1991), Barnes (1975), and Ward (1986). These three studies conclusively state that male students did cheat considerably more than female students.

The purpose of Supplementary Question 3 was to address the differences in academic conduct between younger and older students. In doing the analysis however, under 32 years category was further subdivided into 18-22, 23-27, and 28-32 years. Several factors such as cheating on tests, plagiarizing other peoples' work, copying/pasting Internet materials into students' academic papers, and taking actions contrary to faculty instruction were deployed in evaluating the various relationships.

In the six measures used to evaluate this question (i.e., cheating, plagiarism, using others' materials, copying and pasting, working contrary to faculty instruction, and involvement in academic dishonesty), more students in the 18-22 age group, a subset of the younger students (under 32 years) were found to be more academically dishonest than older students (over 32 years). This finding was supported by Haines et al. (1986). However, in another study, Michaels and Miethe (1989) noted that older students did cheat more than younger students. Using GPA as the basis of performance, younger students appear to have had higher GPAs than older students. In the final analysis, the differences between the groups were statistically significant in almost all instance.

Implications of the Research Findings

In this study, the central theme has been on the extent to which instruction in ethics relates to students' academic honesty. This study did not establish that ethics

instruction plays an important role in academic dishonesty. What we do know however is that the value of scholarship is affected when there is academic dishonesty because originality is lost. Throughout the literature review it is clear that academic misconduct has negative impact on education. Furthermore, cynicism is populated throughout institutions even if only a few individuals are culpable. Often the debate on academic dishonesty is ignited when students cannot perform certain basic work-related tasks. In addition, as unethical practices surface in corporation, there is deeper search for the re-assessment of curriculum relating to the teaching of ethics. Most education institutions would be somehow happier if they could find a way to eliminate academic misconduct from the education system. However, some people argue that character is needed in business schools to make things better and different for business students (McCabe, Butterfield & Trevino, 2006, p. 294).

The implications of this study confirm the continued existence of academic dishonesty in institutions of higher learning. Potentially the study's finding serve as a reminder that the education system continues to be under threat from students who continue to cheat or plagiarize in college. It would have been a pleasurable experience for this researcher if this study showed that all the participants surveyed indicate that they were in full compliance with academic honesty. In other words all students were both honest to themselves, the institution, and the society as a whole. But such thought would have been a reflection of utopianism, wishful thinking, and naivety.

The study was conducted in nine different locations in geographically dispersed areas. The recurring theme was that none of the institutions studied were insulated against academic misconduct, which confirms the ubiquitous nature of academic misconduct.

The findings of the study further confirm that academic misconduct is epidemic which continues to spread throughout the education system. It seems however the level of academic dishonesty reported in this is in keeping with earlier researchers (Baker, Berry, & Thorton, 2008; McCabe, 2007; Rakovski & Levy, 2007). The treatment of academic misconduct is not that straight forward. Furthermore, the admission of guilt to academic dishonesty is often based on self-reporting. However, there are instances when the perpetrators are caught and are subject to academic sanctions and even in some instances to academic dismissals.

As observed in this study, academic misconduct takes many forms (i.e., cheating on tests, plagiarizing, copying/pasting Internet sources into one's own assignment, and using sources without acknowledging credit) and without due diligence from instructors, various dishonest acts can go unnoticed for extended periods of time. Another implication of the study is that more female students were found to be more involved in academic dishonesty than male students. However, this could have been influenced by the overwhelming number of female students participating in this study. It is common knowledge that there are more female students in college than males. In this study, there were almost twice as many female students than were male students.

One surprising outcome of the study was that there were no significant differences between students in AACSB and non-AACSB accredited schools. The expectation was, given the fact that in AACSB accredited schools students must take mandatory courses in ethics, that there would be lower levels of academic misconduct than non-AACSB institutions. There was no statistical significance between the two groups. In other words, on the ethical side, the two groups behaved approximately similar: most engaged in

academic dishonesty in one form or another. However, this study did not establish conclusively whether the ethics course was taken before or after the cheating occurred.

Future Research

This study was carried out at nine institutions of higher learning, four of which were located in the Caribbean (three in Jamaica, and one in the Cayman Islands) and five located in the state of Georgia. A total of 1,017 students participated in the study from across the two geographical regions. Therefore, generalization of the findings to other students to both the remainder of the United States and the Caribbean islands would be erroneous and inappropriate. A broader coverage of U.S. locations might have been more beneficial.

Data were collected based on a custom designed survey. Participants were asked to record their responses to items noted in the questionnaire. This was a quantitative study that relied entirely on self-reporting. Creswell (2005) explained the benefits to be derived from mixed methods. However he concluded that the appropriateness of a survey is important when the researcher is attempting to access the attitude of respondents (p. 354). Students may feel exposed when questioned in person about their academic honesty. Because this study utilized a non-intrusive self-reporting anonymous questionnaire it is likely to provide more reliable responses than personal interviews. In addition, a more robust and broad-based sample could be obtained from AACSB schools, particularly as these schools have mandatory ethics courses built into their curriculum to explore academic conduct before and after the course..

This study was grounded in an ethics framework. However, further studies could be undertaken based on Deviance Theory (Michaels & Miethe, 1989) since students who

engage in academic misconduct depart from compliance with standard normal norms.

The researcher recommends the following for future research. There is a perception that academic standards of AACSB and non-AACSB institutions are different.

1. Future research should be done to determine the influence of teaching ethics in AACSB schools and to ascertain if there is an increasing percentage of academic dishonesty among these institutions.
2. General understanding of academic dishonesty between students in the Caribbean and the United States colleges should be done to gain a better understanding of academic dishonesty across these regions.

Limitations

One of the weaknesses of the study was that there was no way to validate whether all participants completed an ethics course at the participating university or if the student transferred to a course from a non-participating university prior to doing the survey. Therefore, the researcher must rely on the integrity of the students who indicate that they did have instruction in ethics.

Another weakness was that the self-reporting instrument (questionnaire) will reflect only what each participant chooses to report. Hence it is possible that participants may provide answers that will put them in a more favorable position. To minimize the incidence of this, the instrument clearly stipulates anonymity and confidentiality. In addition, no class attendance roster was taken during the administration of the survey. In this regard there could be factors other than those investigated that may influence students' academic misconduct or their responses.

Although there is a plethora of literature available on the frequency with which students engage in various acts of academic misconduct, relatively few studies have provided large sample sizes from which the conclusions were drawn. There were gaps in the literature in terms of students' exposure to moral education and the influence of such coursework on students' cheating. However, it would be prudent to first establish if cheating is a habit to make greater sense of the findings. Similarly, there was an absence of discussion on what influence, if any, a course in ethics would have on those students who indicated that they cheated in the past. Finally, what is unclear in the literature is the relative importance of the students' core ethical beliefs with respect to their character traits and how instruction in ethics influences academic honesty among students. This study covers parents' background to include education, career/occupation, and support.

Conclusions

The principal purpose of this research study was to determine the extent to which students are affected by taking a course of instruction in ethics. In other words, the extent to which this affects students' academic honesty.

The study indicated that (a) there was no statistical significance on academic misconduct between students who did complete a course of instruction in ethics and those who did not complete the course; (b) approximately 40% ($n = 400$) of the students showed positive responses with respect to awareness of academic conduct, (c) several students admitted their involvement in academic dishonesty for various reasons (e.g., to get a better grade); (d) in relation to the perception of academic conduct, character traits and honor code were positively correlated; (e) parents' background (e.g., education, career/occupation) did have some influence on students' academic conduct; (f) students

with high self-esteem appeared to be more honest than those with lower self-esteem, (g) in relation to honor code there were no differences in academic conduct between students attending AACSB and non-AACSB schools; (h) for the most part, it seems female students tended to be more involved in academic dishonesty than male students; and (i) younger students particularly in the 18-22 age group appear to be more culpable when compared with other groups discussed in this study.

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APPENDIX A:

Cross-Match Data Analysis Table

CROSS MATCH DATA ANALYSIS TABLE

RESEARCH QUESTIONS	VARIABLES	HYPOTHESIS	DATA ANALYSIS
1. Is there a difference in the prevalence of academic dishonesty between students who have had ethics instruction and those who have not had it?	1. Ethics instruction. 2. Prevalence of academic?	HP1	Pearson Chi-Square and Cross - tabulations
2. What is the association between students' awareness of academic conduct and the prevalence of academic dishonesty?	3. Awareness of academic conduct. 4. Prevalence of academic dishonesty.	HP 2	Mean, Standard deviation, and ANOVA.
3. What are the reasons for academic dishonesty among business students?	5. Reason for academic dishonesty.		Descriptive Statistics, and Frequency Analysis
4. What is the relationship between students' perception of academic conduct, and character traits, and honor code?	6. Perception of academic conduct. 7. Character traits. 8. Honor code.	HP 3	Pearson Correlation
5. Is there a difference in students' academic	9. Academic conduct. 10. Religion. 11. Parents' background.	HP 4	Pearson Chi-Square and Cross - tabulations

conduct based
on their parents'
background and
religion?

6. Is there a
relationship
between self-
esteem and
students'
academic
conduct?

12. Self-esteem.
13. Academic
conduct.

HP 5

Descriptive
Statistics, Mean,
Standard
Deviation and
ANOVA

SUPPLEMENTARY QUESTIONS

1. In relation to
honor code, is there
a difference in
students' academic
conduct between
those who attend
AACSB accredited
schools compared
with students who
attend non-AACSB
schools?

14. AACSB/Non-
AACSB.
15. Honor code.

Independent
Samples t – Test,
Mean and
Standard
Deviation.

2. Is there a
difference in
academic conduct
between male and
female business
students?

16. Academic
conduct.
17. Gender.

Pearson Chi-
Square and Cross
- tabulations

3. Is there a
difference in
academic conduct
between younger
students (under 32
years) and older
students (32 years
and older)?

18. Age.
19. Academic
conduct.

Pearson Chi-
Square and Cross
- tabulations

APPENDIX B:

IHL by Region

Participating IHLs have been arbitrarily assigned codes (unrelated to the order in which the institutions appear) to facilitate discussions and to allow for easier comparison based on information gleaned from the study. The following table is a summary of the participating IHLs by region, IHL assigned code, and program accreditation body.

Control Number	Geographical Territory	IHL Code	Program Accreditation Body
1	United States	U.S._1	AACSB
2	United States	U.S._2	AACSB
3	United States	U.S._3	AACSB
4	United States	U.S._4	AACSB
5	United States	U.S._5	Non-AACSB
6	Caribbean Island	CS_1	Non AACSB
7	Caribbean Island	CS_2	Non AACSB
8	Caribbean Island	CS_3	Non AACSB
9	Caribbean Island	CS_4	Non AACSB

APPENDIX C:

Questionnaire on Academic Misconduct

Questionnaire on Academic Misconduct since being in college.
(Revised: February 18, 2010)

This Questionnaire contains seven (7) sections, each of which is designed to explore different phases of academic misconduct. Please read the instructions carefully as you complete this self-reporting instrument. There are 11 pages. All responses are anonymous and confidential. Please do not write your name on this Questionnaire.

Academic misconduct, also referred to as academic dishonesty, is defined as occurring when students engage in acts of dishonesty in an education setting. It includes cheating, plagiarism, copying from other students, using class notes for exams when prohibited by the instructor, and copying and pasting Internet articles into your assignments to give the appearance that it is your own idea.

Estimated completion time is 10-15 minutes.

Your Attitudes: Section One

This section is intended to determine your attitudes about academic dishonesty in college. Please circle the letter that best indicates your agreement for items 1 through item 14 except item 9. Note that item 9 allows for multiple responses.

1. From my perspective, cheating interferes with learning.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

2. I know other students are doing academically dishonest things (*e.g.*, copy from others, cheat).

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

3. I do not see anything wrong with academic dishonesty.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

4. I would cheat because it's a way to get a better grade.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

5. If my college had an Honor Code, I would sign it because I am against all forms of academic dishonesty.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

6. An Honor Code has no effect on me.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

7. If I had a child in college and the college used disciplinary procedures with my child for committing academic dishonesty, I would be in favor of the college's position.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

8. A student should be punished for using other students' work or ideas without permission and acknowledgement.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

9. In the last two years, have you done any of the following in college? (Circle all the letters that apply to you for question 9)

- a. Cheat on tests.
- b. Plagiarize other people's work.
- c. Use other students' materials without acknowledging credit.
- d. Copy and paste Internet materials into your own work/papers.
- e. Get help from other students even though instructors asked you not to.
- f. Not involved in any form of academic misconduct in the last two years.

10. If you engaged in academic dishonesty, circle one letter here that shows the **strongest** reason for doing so. If you never did, circle (e).

- a. To get a higher grade
- b. To avoid failing the course
- c. To keep my financial award
- d. To keep up with others who cheat
- e. Never engage in any form of academic dishonesty.

11. "I would avoid cheating at all cost." Circle one letter that best indicates your agreement.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

12. If I learned that one of my friends cheated on an assignment, I would be disappointed.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

13. My friends always display hostility toward anyone who cheats.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

14. I have no sympathy toward any student who cheats

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

Cheating Behaviors: Section Two

This section assesses how you would react if others knew you cheated on your academic work. Please circle the letter that best indicates your agreement for items 15 through 18.

15. It would not matter to me if someone knew I cheated in my academic work

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

16. I am afraid of being socially isolated because my friends know about my cheating.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

17. I could lose the respect of some of my friends if I cheated.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

18. Academic cheating can be demoralizing to other students.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

Personal Traits: Section Three

In this section, the main purpose is to determine your character traits. Please circle the letter that best indicates your agreement for items 19 through 24.

19. When I have to make a decision, I can differentiate between what is ethically right and what is ethically wrong. **(Circle one letter)**

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

20. In relation to academic dishonesty, to what extent are you affected by peer pressure?
(Circle one letter)

- a. Not at all
- b. Somewhat or occasionally
- c. All the time.

21. In general, a person's ethical core of beliefs should be more important in determining his/her conduct than the specific details of a current situation. **(Circle one letter)**

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

22. A student may need to be academically dishonest even if it is unethical to do so, if he /she could fail the course. **(Circle one letter)**

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

23. Have you ever been academically dishonest in college? a) Yes b) No **(Circle one letter).**

24. How many times have you been academically dishonest in college? Circle the correct response.

- | | | | |
|----------|-----------|-----------|-------------------|
| a | b | c | d |
| None | 1-2 times | 3-4 times | More than 4 times |

Parents' Perspective: Section Four

This section is designed to get some perspective on how your parents view education. Please respond as best as you know, even if your response was based on what you learned from your parents when you spoke with them.

25. What is the age of your parents in **December 2009**? (Mark one ✓ for each parent)

Parents	Under 50 years	Over 50 years	No longer alive
Mother			
Father			

26. What is the **highest** education level attained by each of your parents as of **December 2009**? (Mark one ✓ for each parent.)

Education Level	Mother	Father
1. High school diploma or less		
2. Some college		
3. Bachelor's degree		
4. Master's degree		
5. Doctorate		

27. How would you classify your parents' career or occupation? **For items 1 through 6, mark one ✓ for each parent in space provided to represent parents' career or occupation. Where item 7 is selected, write response in the empty space on line 8.**

Career or Occupation	Mother	Father
1. Management, Business, and Financial Occupations		
2. Professional and Related Occupations (such as computer specialist, medical doctor, engineer, lawyer, community and social service occupations)		
3. Service Occupations (such as health care support or protective		

service operations)		
4. Sales and Related Occupations		
5. Farming, fishing, and forestry occupations		
6. Construction and extraction occupations		
7. Other careers/occupations (specify at 8)		
8. Write your response in columns at right → →		

28. If you were struggling academically, what support would your parents provide?

Circle the letter corresponding to the statement that best describes your perceptions of your parent's action.

- a. One or both of my parents would work with me until I can solve the problem.
- b. My parent(s) would ask another student to work closely with me.
- c. My parent(s) would pay for extra lessons subject to their ability to pay.
- d. I would get no academic help or extra financial support from parents to improve my learning and performance in courses.

29. "My parent(s) display keen interest in my education."

Circle the letter that best indicates your agreement of your parent's interest.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

30. "My parent(s) display a strong religious belief.

Circle the letter that best indicates your agreement of your parent's belief.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

31. "My parent(s) believe there is a strong connection between religion and honesty."

Circle the letter that best indicates your agreement of your parent's position.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

Personal Information: Section Five

The main purpose of this section is to collect some personal information on you. Please be assured your answers will be anonymous.

32. What is **your** age on your last birthday? **Circle the appropriate letter.**

- a) 18 – 22 years b) 23 – 27 years c) 28 – 32 years d) Over 32 years

33. What is your gender? **Circle the appropriate letter.** a) Male b)Female

34. What is the highest level of academic (undergraduate) work you already completed?
Circle the appropriate letter.

- a) Freshman (1st year) b) Sophomore (2nd year)
c) Junior (3rd year) d) Senior (4th year)

35. What is your current **Grade Point Average on a 4-point scale as of December 2009?** **Circle the appropriate letter.**

GPA

- a) 1.99 or less
b) 2.00 – 2.49
c) 2.50 – 2.99
d) 3.00 – 3.49
e) 3.50 – 4.00

36. What degree and what major are you now pursuing? (Complete the table)

Degree (e.g., BS, BAA)	Major (e. g., Accounting)

37. Have you completed a college level course in Ethics? **Circle the appropriate letter.**

- a). Yes, in the Business Department
b). Yes, in another Academic Department
c). No

38. If you completed a course in Ethics, to what extent did it impact you and academic honesty? **Circle the appropriate letter that best describes your response below.**

- a. It led me to change my ethical reasoning.

- b. I did not get involved in academic dishonest acts even before I took the ethics course, and I still don't.
 - c. The Ethics course had no impact on my thinking or behavior in regard to academic dishonesty.
39. From the generalized perspective of most of your college peers, which statement is **most true?** Circle the appropriate letter.
- a. Receiving good grades is more important than anything else.
 - b. Many students are willing to sacrifice some of their self concept as "an honest person" if it means they can receive a higher grade.
 - c. Most students I know want to preserve their integrity and self-concept.
40. Have you prepared a Résumé in anticipation of getting a job? **Circle the appropriate letter. If yes, go to item 41. If no, go to item 42.**
- a. Yes b. No
41. My résumé accurately reflects my experience, training, skill sets, and education. ***Circle the letter that best indicates your agreement.***

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

College and Employment Relationships: Section Six

These items will explore the connections between academic dishonesty in college and professional behavior in the workplace. Circle the letter that best indicates your agreement for items 42 through 46.

42. The level of ethics and honesty that students show in their college work is very similar to the ethics and honesty they will show in their professional job behavior.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

43. Consider the influence of your student college (peers) in determining your practices of academic honesty. **Then think ahead to what will probably be true when you are doing your professional work.** Do you think your professional colleagues will have as much influence on your business ethics as your student college (peers) have had on your academic ethics?

1
Business colleagues will have less influence than students.

2
Each group will have the same influence on my ethical behavior.

3
Business colleagues will have more influence on my ethical behavior.

44. Regardless of the level of academic honesty I showed in college, I am quite certain that my behavior in the business world will be consistently ethical, honest, and lawful.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

45. I believe I'll be able to do some less than ethical things in my business career and avoid any difficulties because of it.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

46. It is important to me that my grades are comparable with other students' grades

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

Self-Esteem Issues: Section Seven

This section assesses your self esteem. Please circle the letter that best indicates your agreement for each item 47 through 62.

1. My appearance is important to me.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

48. I feel that I am a person of worth, at least on an equal basis with others.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

49. For me, group opinion is more important than the opinion of one person.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

50. I am concerned with what other people think about me.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

51. I feel that I have a number of good qualities.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

52. I think that cheating is bad for the education system.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

53. I do not think there can be any justification to cheat.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

54. Being honest, is extremely important to me

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

55. On the whole, I am satisfied with myself

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

56. All in all, I'm inclined to feel that I am a failure.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

57. I am able to do things as well as most other people.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

58. I feel I do not have much to be proud of.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

59. I take a positive attitude toward myself.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

60. I wish I could have more respect for myself.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

61. I certainly feel useless at times.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

62. At times, I think I am no good at all.

a
Strongly
Agree

b
Agree

c
Disagree

d
Strongly
Disagree

If you have any comments please write in the space provided below.

**THANK YOU VERY MUCH FOR PARTICIPATING IN THIS SURVEY. BEST WISHES TO YOU
AS YOU PURSUE YOUR EDUCATION WITH HONESTY AND A SENSE OF PURPOSE**

APPENDIX D:
Variable Related Walk-Through Table

Variable Related Questions Walk-Through Table

REFERENCE NUMBER	VARIABLES	RELATED SURVEY QUESTION	HYPOTHESIS (HP)
1.	Ethics Instruction	Q19, Q20, Q21, Q22, Q37, Q38	HP 1
2.	Prevalence of Academic Dishonesty	Q23, Q24	HP 1
3.	Awareness of Academic Conduct	Q2, Q4, Q16, Q17, Q18, Q39, Q40, Q41	HP 2
4.	Reason for Academic Dishonesty	Q10	(Descriptive)
5.	Perception of Academic Conduct	Q1, Q3, Q42, Q43, Q44, Q45, Q46.	HP 3
6.	Character Traits	Q7, Q8, Q11, Q12, Q13, Q14, Q15	HP 3
7.	Honor Code	Q5, Q6	HP 3
8.	Academic Conduct	Q9, Q34, Q35, Q36	HP 4
9.	Parents' Background	Q25, Q26, Q27, Q28, Q29	HP 4
10.	Religion	Q30, Q31	HP 4
11.	Self-esteem	Q47, Q48, Q49, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q57, Q58, Q59, Q60, Q61, Q62	HP 5
12.	AACSB/Non-AACSB	Determined based on institutions selected.	
13.	Gender	Q33	
14.	Age	Q32	

Note:

The Cross Data Analysis Table actually shows a variable count of 19 because it contains 5 duplicate variables. This means there are 14 variables to be assessed.

REVISED 02-11-2010

APPENDIX E:

Rosenberg's Self-Esteem Scale

ROSENBERG'S SELF-ESTEEM SCALE (ORIGINAL)

STATEMENT		Strongly Agree	Agree	Disagree	Strongly Disagree	
1.	I feel that I am a person of worth, at least on an equal plane with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2.	I feel that I have a number of good qualities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3.	All in all, I am inclined to feel that I am a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4.	I am able to do things as well as most other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5.	I feel I do not have much to be proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
6.	I take a positive attitude toward myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
7.	On the whole, I am satisfied with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
8.	I wish I could have more respect for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9.	I certainly feel useless at times.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10.	At times I think I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Your score on the Rosenberg self-esteem scale is: .

Scores are calculated as follows:

- For items 1, 2, 4, 6, and 7: (Original)

Strongly agree = 3

Agree = 2

Disagree = 1

Strongly disagree = 0

- For items 3, 5, 8, 9, and 10 (which are reversed in valence): (Original)

Strongly agree = 0

Agree = 1

Disagree = 2

Strongly disagree = 3

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. (Original)

APPENDIX F:
Participation and Consent Letter



February 10, 2010

Dear Participant,

My name is Claude Oakley and I am a researcher from Colorado State University in the School of Education. We are conducting a research study to determine if taking a course of instruction in Ethics has any influence on students' academic conduct. The title of the project is *Instruction in Ethics: Influences on Undergraduate Business Students' Academic Conduct*. The Principal Investigator is Carole Makela, Ph.D. of the School of Education and the Co-Principal Investigator is Claude Oakley, a doctoral candidate at the School of Education.

There are no direct benefits of participating in this study. However, through your participation in the study you may gain a better understanding of what is involved in academic conduct in an educational setting. The information may provide empirical evidence in determining whether students who complete ethics courses behave differently from those who do not complete the course.

We would like you to complete the attached questionnaire on academic conduct. The survey will take approximately 15 minutes to complete. Your participation in this research is voluntary and will have no impact on your grade. Your responses are completely anonymous because you are not asked to write your name on the survey. The results of the survey are reported as group findings. This means that *no one* knows how you responded to the items on the survey. Therefore, there are absolutely no risks involved in completing this survey.

As soon as you complete this in-class survey, please give it to your instructor or hand it to the person who is designated as the survey coordinator. Your completion of this survey means that you voluntarily consented to participate in the study. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator, Colorado State University at 970-491-1655. Similarly, if you have any questions or are interested in the outcome of this survey, and what it means for education, please not hesitate to contact Claude Oakley at 770-736-0071 or via email at croakley@bellsouth.net.

Thank you very much for participating in the survey.

Carole Makela, Ph. D.
Professor & Director of Education
Carole.makela@colostate.edu

Claude Oakley
Doctoral Candidate
croakley@bellsouth.net

APPENDIX G:
Instructions for Faculty Action

This is the note that will be read by the faculty member to students prior to their participation in the survey. Faculty action is also included.

Faculty Announcement

Today you are being asked to participate in this study on students' academic conduct. Your participation will need to meet two simple criteria: 1) that your program of study includes business related courses, and 2) that you have taken ethics either as course of study or included as part of a course prior to March 7, 2010. If you meet the two criteria you are eligible to participate in the survey. The survey is voluntary.

Nature of the study

Doctoral research is being carried out to determine the nature of academic conduct in 9 selected colleges and universities across the Caribbean (Jamaica and Cayman Islands) and the United States (Atlanta, Georgia). No participating institution or student will be identified by name. By way of definition, academic conduct relates to the degree to which students uphold and follow the rules of the institution regarding a specified code of conduct. For example, students' responsibilities as regards to academic cheating (i.e., copying from another student, looking at someone's exam paper) and plagiarism (i.e., cutting and pasting materials into assignments from the Internet, using sources without proper credit).

Steps in administering the survey

1. Please give a copy of the survey to each student. Ask students not to write their names on the questionnaire. It is an anonymous survey.
2. As soon as the students complete the questionnaires have each student place their survey in the self addressed box provided. Thank you.

APPENDIX H:

Email Requesting Cooperation To Conduct Survey



February 10, 2010

FACULTY'S INVOLVEMENT IN SURVEY ON ACADEMIC INTEGRITY AMONG
UNDERGRADUATE STUDENTS

Dear Professor,

My name is Claude Oakley and I am a researcher from Colorado State University in the School of Education. I am contacting you to invite your class to participate in my doctoral research project titled *Instruction in Ethics: Influences on Undergraduate Business Students' Academic Conduct*. The purpose of the research is to gain an understanding of the relationship between Ethics instruction and academic conduct. My advisor on this research project is Carole Makela, Ph.D., also from the CSU School of Education,

The aim is to survey the students in the classes that you teach within the next couple of weeks at a time that is convenient to you. The survey will take students approximately 15 minutes to complete, and is anonymous as no identifying information on the students will be collected. Therefore, there are absolutely no risks involved in completing this survey. There are no direct benefits of participating in this study. However, the researchers believe that the students' participation will increase their understanding of what is involved in academic conduct in an educational setting. Additionally, the information may provide empirical evidence in determining whether students who complete ethics courses behave differently from those who do not complete the course.

When you confirm your interest in participating in this study, I will send you the paper copy survey or I will bring the copies to you. I will also provide you with a prepaid envelope to facilitate the return of the completed survey. Hopefully, you find it possible to return the package by the following day.

If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator, Colorado State University at 970-491-1655. Similarly, if you have any questions or are interested in the outcome of this survey, and what it means for education, please do not hesitate to contact Claude Oakley at 678-234-9175 or via email, croakley@bellsouth.net.

Thank you very much for participating in the survey.

Carole Makela, Ph. D.
Professor & Director, School of Education

Claude Oakley
Doctoral Candidate

APPENDIX I:
Survey Instrument Coding

Survey Instrument Coding Guide
EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QA	Attitude	<p>Q 1 through Q 8</p> <p>a = 1 (Strongly Agree)</p> <p>b = 2 (Agree)</p> <p>c = 3 (Disagree)</p> <p>d = 4 (Strongly Disagree)</p> <p>(Q1, Q 7 – Q 8 reversed coding)</p> <p>Q 9 (Multiple responses permitted.)</p> <p>Circled responses = 1</p> <p>Non-circled responses = 0</p> <p>Q 10</p> <p>a = 1</p> <p>b = 2</p> <p>c = 3</p> <p>d = 4</p> <p>e = 5</p> <p>Q 11 through Q 14</p> <p>a = 1 (Strongly Agree)</p> <p>b = 2 (Agree)</p> <p>c = 3 (Disagree)</p> <p>d = 4 (Strongly Disagree)</p> <p>(Q 11 – Q 14 reversed coding)</p>

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QCB	Cheating Behaviors	Q 15 through Q 18
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
		Note: Q 16 – 18 reversed
QPT	Personal Traits	Q 19
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
		Q 20
		a = 1 (Not at all)
		b = 2 (Somewhat or occasionally)
		c = 3 (All the time)
		Q 21 through Q 22
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QPT	Personal Traits (cont'd)	Q 23
		a = 1 (Yes)
		b = 2 (No)
		Q 24
		a = 1 (None)
		b = 2 (1 – 2 times)
		c = 3 (3 – 4 times)
		d = 4 (More than 4 times)
		Q 25: Age of Parents
		1 = Under 50 years
QPP	Parents' Perspectives	2 = Over 50 years
		3 = No longer alive
		Q 26: Parents' Education Level
		1 = High School or less
		2 = Some College
		3 = Bachelor's Degree
		4 = Master's Degree
		5 = Doctorate

EXCEL AND SPSS CODING LOGIC

Coding Reference	Description/Code
QPP Parents' Perspectives (cont'd)	<p>Q 27: Parents' Profession</p> <p>1 = Business/Management/ Financial</p> <p>2 = Professional/Related (<i>e.g.</i>, computer specialist, medical doctor)</p> <p>3 = Service Occupation (<i>e.g.</i>, health, protective services)</p> <p>4 = Sales and Related Occupation</p> <p>5 = Farming/Fishing/Forestry</p> <p>6 = Construction/Extraction</p> <p>7 = Others</p> <p>Note for Option #7:</p> <p>(i) Force responses from back into '1' to '6'.</p> <p>(ii) Assign zero (0) for "Stay at home", "Pensioner" or "No work" categories.</p>

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QPP	Parents' Perspectives (cont'd)	Q 28
		a = 1 (Parent would work with respondent)
		b = 2 (Parent would ask another student to work with respondent)
		c = 3 (Parent would pay for extra lessons for respondent)
		d = 4 (Parent provide no academic help/financial support to respondent)
		e = 5 (Respondent has no expectation of support from parents)
		Q 29 through Q 31
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
QPI	Personal Information	d = 4 (Strongly Disagree)
		(Q 30 – Q31 reversed coding)
		Q 32: Age
		a = 1 (18 – 22 years)
		b = 2 (23 – 27 years)
		c = 3 (28 – 32 years)
		d = 4 (Over 32 years)

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QPI	Personal Information (cont'd)	Q 33: Gender
		a = 1 (Male) b = 2 (Female)
QPP	Parents' Perspectives	Q 34: Respondent's Education
		a = 1 (Freshman, 1 st year)
		b = 2 (Sophomore, 2 nd year)
		c = 3 (Junior, 3 rd year)
		d = 4 (Senior, 4 th year)
		Q 35: Estimate of GPA
		a = 1 (1.99 or less)
		b = 2 (2.00 – 2.49)
		c = 3 (2.50 – 2.99)
		d = 4 (3.00 – 3.49)
		e = 5 (3.50 – 4.00)
		Q 36: Education Major
		1 = Business
		2 = Non Business

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QPI	Personal Information	<p>Q 37: Ethics Instruction</p> <p>a = 1 (Yes, in Business Dept/School)</p> <p>b = 2 (Yes, in another Academic Dept)</p> <p>c = 3 (No)</p> <p>Note: For #37, if the answer is “No” then #38 will be assigned a zero (0). Skipped question based on directive, assign a zero (0). Also, if #38 is not answered assign missing code of ‘66’.</p> <p>Q 38: Course in Ethics</p> <p>a = 1 (Change in ethical reasoning)</p> <p>b = 2 (Not involved in academic dishonesty even before taking ethics course)</p> <p>c = 3 (Course had no impact on thinking/behavior in regard to academic dishonesty)</p> <p>Note: For #37, if the answer is “No” then #38 will be assigned a zero (0). Skipped question based on directive, assign a zero (0). Also, if #38 is not answered assign missing code of ‘66’.</p>

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QPI	Personal Information (cont'd)	<p>Q 39: Peer Perspective</p> <p>a = 1 (Receiving good grades is more important than anything else)</p> <p>b = 2 (Willing to sacrifice some of their self concept as “an honest person” if it means receiving a higher grade)</p> <p>c = 3 (Most students I know want to preserve their integrity /self-concept)</p> <p>Q 40: Résumé</p> <p>a = 1 (Yes)</p> <p>b = 2 (No)</p> <p>Note: If #40 is “No” and a selection is made for #41 assign zero (0). Skipped question based on directive, assign zero (0).</p> <p>Q 41: Résumé Content</p> <p>a = 1 (Strongly Agree)</p> <p>b = 2 (Agree)</p> <p>c = 3 (Disagree)</p> <p>d = 4 (Strongly Disagree)</p> <p>Note: If #40 is “No” and a selection is made for #41 assign zero (0). Skipped question based on directive, assign zero (0).</p> <p>(Q41 Reversed coding)</p>

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QCER	College and Employment Relationship	Q 42: Level of ethics and honesty
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
		(Q 42 reversed coding)
		Q 43: Influence from professional colleagues/peers in College
		1 = 1 (Less influence)
		2 = 2 (Same influence)
		3 = 3 (More influence)
		Q 44: Behavior in business world
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
		Q 45: Less than ethical
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)

EXCEL AND SPSS CODING LOGIC

Coding Reference		Description/Code
QCER	College and Employment Relationship (cont'd)	Q 46: Comparable Grades
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
QSE	Self-Esteem	Q 47 through Q 62
		a = 1 (Strongly Agree)
		b = 2 (Agree)
		c = 3 (Disagree)
		d = 4 (Strongly Disagree)
		Q 50, Q 56, Q 58, Q 60, Q 61 and Q 62 (Reversed coding)

GENERAL NOTES:

1. Missed Items

These are assigned a valence of 66.

2. Reversed Coding

These relate to Questions 1, 5, 7, 8, 11, 12, 13, 14, 16, 17, 18, 30, 31, 41, 42, 50, 56, 58, 60, 61 and 62, which should be re-evaluated as follows.

Strongly Disagree = 1

Disagree = 2

Agree = 3

Strongly Agree = 4

APPENDIX J:

Cover Letter for Student Survey

February 10, 2010

Dear Participant,

My name is Claude Oakley and I am a researcher from Colorado State University in the School of Education. We are conducting a research study to determine if taking a course of instruction in Ethics has any influence on students' academic conduct. The title of the project is *Instruction in Ethics: Influences on Undergraduate Business Students' Academic Conduct*. The Principal Investigator is Carole Makela, Ph.D. of the School of Education and the Co-Principal Investigator is Claude Oakley, a doctoral candidate at the School of Education.

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We would like you to complete the attached questionnaire on academic conduct. The survey will take approximately 15 minutes to complete. Your participation in this research is voluntary and will have no impact on your grade. Your responses are completely anonymous because you are not asked to write your name on the survey. The results of the survey are reported as group findings. This means that *no one* knows how you responded to the items on the survey. Therefore, there are absolutely no risks involved in completing this survey.

As soon as you complete this in-class survey, please give it to your instructor or hand it to the person who is designated as the survey coordinator. Your completion of this survey means that you voluntarily consented to participate in the study. If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator, Colorado State University at 970-491-1655. Similarly, if you have any questions or are interested in the outcome of this survey, and what it means for education, please not hesitate to contact Claude Oakley at 678-234-9175 or via email at croakley@bellsouth.net.

Thank you very much for participating in the survey.

Carole Makela, Ph. D.
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